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2238-2239-2240
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Diag. Cat Nos.
8252-1
82021

Steamer "C. J. Patterson"

Season of 1895.

Descriptive Report of Work,

Peril Strait and Kelp Bay.

E. K. Moore

Lieut. Comdr. U.S.N.

Chief of Party.

H. L. Ford.

2239

Diag. Cht. Nos. 8202-1 & 8252-1

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

Superintendent.

State: Alaska

DESCRIPTIVE REPORT.

Hyd^c Sheet No 2239

LOCALITY:

See

2238

1895
190

CHIEF OF PARTY:

E. K. Moore

2239

2240

Diag. Cht. No. 8252-1

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

Superintendent.

State: *Alaska*

DESCRIPTIVE REPORT.

Hyd. C. Sheet No *2240*

LOCALITY:

See

2238

1895
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CHIEF OF PARTY:

E. K. Moore

2240
OF
22

2241

Diag. Cht. No. 8252-1

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

Superintendent.

State: Alaska

DESCRIPTIVE REPORT.

Hyd^c Sheet No. 2241

LOCALITY:

See

2238

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CHIEF OF PARTY:

EK Moore

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Diag. Cht. No 8252-1

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

Superintendent.

State: Alaska

DESCRIPTIVE REPORT.

Hyd. Sheet No 2242

LOCALITY:

See

2238

1895
190

CHIEF OF PARTY:

ER Moore

2242
42

2243

Diag. Cht. No. 8252-1

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

Superintendent.

State: *Alaska*

DESCRIPTIVE REPORT.

H.A.C. Sheet No. *2243*

LOCALITY:

See

2238

1895
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CHIEF OF PARTY:

E. K. Moore

2243

Steamer "C. P. Patterson"

Season of 1895.

Descriptive Report of Work.

Peril Strait and Kelp Bay

By

Mr. H. L. Ford.

E. H. Moore

Lieut. Comdr. U. S. N.

Chief of Party.

1

Teril Strait and Kelp Bay, Scale 1/40,000.

This sheet covers the ground surveyed in the season of 1895 from Points Thatcher and Hayes to Pogibshi Point, at the entrance of the narrows, and the arms and the bays to the westward included on the old charts under the name of Hooniah Sound. For convenience in topography, as well as to give a better idea of its relative position, Kelp Bay was included on this sheet. As the projection furnished by the Office was unsuited in its size and limits for this area, the present sheet was used, and the stations were computed and plotted as plane triangulation.

The triangulation of this sheet was carried across Chatham Strait from the base measured in Kootz Bay to Pogibshi Point, a distance of 40 miles, where it was compared with a check base, the computed side comparing with the measured as 1350.1 m. to 1350.48 m. or a difference of one in

nearly four thousand.

The topography was executed in the same manner as in Chatham Strait, the contour interval remaining the same, 200 feet.

Peril Strait is one of the most important waterways in S. E. Alaska, rivaling Wrangell Narrows in the amount of its commerce, and is the only connection between the inland channels and Sitka. It is used by small sloops and schooners, by small steamers employed in the interest of various canneries, sawmills, and mines, by the regular mail steamers throughout the year, and during this last season by two steamers running in opposition to the Pacific Coast Steam Ship Co., from Puget Sound to these waters.

An excellent reconnaissance of the narrows from Sulvia Bay to Pogibshi Point, including also the steamer track from that point to Broad Island, was made by the Officers of

The U.S.S. "Adams" under Comdr. J. B. Coe, in 1884, and but few changes were found by the present survey. (See sheet of the narrows, scale 1:20,000)

The north shore of Peil Strait from Pt. Craven to the head of the northern arm of Nooniak Sound is steep and bold, and after passing Lindenberg Head, is practically a straight line, with no dangers except an occasional flat of small extent making off the mouth of a stream. The shore can be approached with safety to within a quarter of a mile. The mountains are covered with a moderate growth of timber and underbrush, their tops being generally bare and rocky except when noted on the sheet.

Mrs. Clellan Rock, marked by a spindle, immediately off Lindenberg Head, and a sunken rock off a small open bight, two miles to the eastward of Lindenberg Head are the only dangers from this Point to Point Craven.

The principal landmarks in Peril Straits are Fairway Island in the eastern entrance, Lindenberg Head, the Point at which Peril Straits changes direction, a series of bare rocky hills and cliffs $2\frac{1}{2}$ miles above Lindenberg Head and Broad Island, lying $\frac{3}{4}$ mile off the northern shore at the western end of the strait. Several landslides will be referred to later.

The southern shore of Peril Straits is much indented by small bights, coves and inlets, and although the mountains back of the shoreline are in many instances higher than those of the northern side, the slopes are generally less abrupt.

Point Craven is the western point of a narrow inlet, known as Sitkoh Bay about $6\frac{1}{2}$ miles in length that extends in a general northerly direction. The point consists of an outlying rock, about 10 ft in height, with a larger and higher rock nearly half way between it and the shore, connected by ledges showing at low water. A small steep

bluff is on the bounding point of the shore behind the rocks. Deep water can be carried close up to these rocks.

The eastern point of Sittokh Bay is Point Hayes, distant from Pt. Craven $1\frac{1}{4}$ miles N by E $3\frac{3}{4}$ E, and bearing S.S.E. $2\frac{1}{2}$ E distant $1\frac{1}{2}$ miles from Peninsular Pt. in Chatham Straits. This portion of the shore is extremely foul and dangerous, the bottom is irregular, and kelp is particularly thick.

From Pt. Hayes, extending toward Pt. Craven across the mouth of Sittokh Bay, for a distance of $\frac{1}{2}$ mile, are numerous reefs and ledges, some of which are visible at low water only. Two small islands, and a rock lie a short distance off the point.

A 1st class Can Buoy, painted black is moored $1\frac{7}{8}$ miles N E by E $1\frac{1}{2}$ E from Pt. Craven, and $2\frac{7}{8}$ miles N by W $\frac{1}{4}$ W from Pt. Thatcher. Between this and Pt. Hayes is very foul and dangerous ground, and no vessel should attempt to pass to the north

ward of the buoy under any circumstances.

On line between the buoy and Peninsular Point, is an extensive reef, usually well marked by kelp, which shows partially at low water, and runs in a generally northerly direction. A line from the outer rock of Pt. Sparen drawn through the small bare rock off Pt. Hayes on which triangulation signal Queen was built, passes nearly through the center of this ledge. To avoid this ledge, in entering Chatham Straits from Peril Straits, with the buoy close aboard on N. E. 1/2 E. course should be held until the prominent white rock to the northward of Peninsular Pt. is well open, before hauling to the northward. Sitkoh Bay for the first two miles, is about one mile in width, though the channel at the entrance is constricted to half that distance by the ledges and reefs making off to the westward from Pt. Hayes. Two miles above Point

Hayes from the eastern shore projects a low heavily wooded point which forms a bight affording an anchorage in 20 fms. hard bottom, and excellent protection from the northerly gales which are the severe winter winds. Behind the point is a small lagoon bare at low water.

Extending to the southward from the point is a reef about 200 yards in length, visible at low water. By favoring the Pt. Craven shore for a distance of a mile, and then heading for the middle of the bight, all dangers will be avoided.

Beyond this point the bay is but $\frac{1}{3}$ of a mile in width for a distance of $4\frac{1}{2}$ miles, the last mile of which is bare at low tide. Seven eighths of a mile above the point a reef extends into the channel for a distance of 300 yards from the eastern shore, with a small sand flat, and an Indian house on the western shore a little further in. A mid channel course clears

both the reef and the flat, and should be held for $1\frac{3}{4}$ miles further, when the eastern shore should be favored to avoid an extensive flat making out from the western shore. This flat is well marked by a low mound, 100 yards off the western shore, covered by stunted trees and bushes. A small stream empties just to the northward of this mound. The anchorage is $\frac{1}{2}$ mile beyond ^{this mound} in 15 fms. soft bottom.

A small cove, with low sandy shores, $3\frac{1}{2}$ miles N. & $\frac{3}{4}$ E. from Pt. Craven does not afford good anchorage, and this fact coupled with the sunken rock off its entrance recommend that it be not used.

Lindenberg Harbor, $5\frac{1}{2}$ miles S.W. $\frac{3}{4}$ W. from Pt. Craven is formed by the projection of a point with a knoll, 250 feet in height, on which is an extensive windfall. The harbor is protected from the northward and eastward

29

but is rather small with indifferent holding ground. It has been used considerably in northern weather by the regular steamers, but apparently on account of lack of information regarding Sitkoh Bay.

McGlellan Rock, marked by a spindle, is 350 yards off the point toward mid channel. This rock bars for considerable area at low water; there is a narrow passage between it and the point with from 5 to 7 fms, but nothing is gained by its use.

These constitute the only anchorages on the northern shore of Peril Strait.

Point Thatcher, the southern entrance point to Peril Strait, is a low ^{nearly} wooded point terminating in three bare rocks, the inboard one connected with the shore. These rocks extend toward Pt. Craven, and a rock bar at low water, surrounded by kelp lies 100 yards $N\frac{1}{2}$ E. from the outer one. The Columbian Reef described

in the sailing direction as extending one mile north east from Pt. Thatcher, with a width of one quarter mile apparently has no existence. One and one third miles West from Pt. Thatcher are Tea-ders Islands, connected at low water, low and heavily wooded. One and one half miles N.W. $\frac{1}{2}$ N. from Pt. Thatcher is Midway Reef, visible except at high water and extending 750 yards in a general N.W. by direction.

Fairway Island, the prominent landmark for leaving or entering Peril Straits lies two miles W.N. $\frac{1}{2}$ W. from Pt. Thatcher, and one and one quarter miles S.S.E. from Pt. Sparrow. It is about 320 feet high, much rounded, and covered with a thick growth of trees.

From Pt. Thatcher to the eastern point of Hanus Bay, the shore must be avoided by all large vessels. The bottom is very irregular and there are numerous rocks and reefs, some of

which show only at extreme low water, while the sunken rocks are but poorly indicated by Kelp, $\frac{3}{4}$ miles S.W. by W. $\frac{1}{4}$ W. from Fairway is a sunken rock marked by Kelp. Two and one half miles S.W. $\frac{1}{2}$ W. of Fairway Island, and one half mile W. S. W. $\frac{1}{4}$ W. from a small rocky islet with but few trees lies a sunken rock nearly one half mile off the southern shore. This is a pinnacle rock and but one or two pieces of Kelp marked its location at the time of its discovery.

Small craft with local knowledge may find temporary shelter close in shore but no anchorages are recommended. A course midway between St. Eraven and Fairway Island, laid to pass the spindle off Lindenberg Head $\frac{5}{8}$ of a mile to the southward clears all dangers, and requires but one change for continuing up Peril Straits to Broad Island.

Hanus Bay, six miles from St. Thatcher

on the southern shore, abreast Lindenbug Head on the northern shore, is a broad open bight, $2\frac{1}{2}$ miles in width by $1\frac{1}{4}$ miles in depth. At its western end are two coves, the southern one nearly bare at low water, into which empties a small stream the outlet of a small narrow lake. This is quite a fishing station of the Indians during the summer months, when large quantities of salmon and trout are prepared and dried for the winter supply of food. The other cove, about $\frac{1}{2}$ mile in depth affords an anchorage for small craft. Two ledges, bare at low tide lie off the points of these coves at distance of about 80 yards, the outer one lying a little inside of the outer point. In the southeastern corner of Hauss Bay are two low wooded Islands, connected at low water, with reefs and sand-flats extending off their western end for about 200 yards. The eastern Island has a large

amount of standing dead timber which attracts attention at a considerable distance. A shallow pocket behind these islands, with a ledge showing at half tide connects at high water with the north arm of Kelp Bay.

Four miles further to the westward on the southern shore is a small bay, known by the Indians as Sa-rook, three miles in length by about one half mile in width, that affords the best anchorage on this sheet especially in south easterly weather. Its right entrance is marked by a point on which is a conspicuous windfall, and off this point in Seal Strait is a rock about 80 yards from shore, 4 feet out of water at high tide. The left entrance is low and wooded. On the eastern shore of the inlet, $\frac{3}{4}$ of a mile from the entrance is a low wooded island with a small reef on the channel side, distant 20 yards

and generally visible. This [island] is the first of a small group of islands and rocks which extend from it to a low green grassy knoll, $\frac{3}{8}$ of a mile beyond. On the west side, $1\frac{1}{2}$ miles from the entrance is a prominent ravine opening into an amphitheatre in the surrounding hills. From it comes a small stream that makes a very extensive sand and gravel bar. This bar is much larger than would ordinarily be expected and extends fully half way across the inlet. Beyond it there are no obstructions until the flats at the head are reached, one mile beyond the ravine. A good sized stream noted for large numbers of trout empties at the head. The anchorage is $\frac{5}{8}$ of a mile beyond the bar, in the middle of the inlet, in 18 to 22 fms, soft green mud. Excellent water can be obtained from any of the numerous small streams that come in on each side.

of the anchorage, preferably at high water when a better approach to them can be had.

Peril Strait is entirely hidden from the anchorage.

Four and one half miles further on the south shore is the entrance to an inlet, Rodman Bay which extends to the southward for six miles.

Its western point is high and well wooded, with reefs extending off shore for about 100 yards.

The eastern point is low and between it and a small cove on the eastern shore are several rocks, bare at low water, but not generally visible. This inlet is 6 1/2 miles from Broad Island, and 8 miles from Lindenberg Head.

At the entrance it is about 2 miles wide, but contracts in 1 1/2 miles to 5/8 mile, a small wooded island lying off the eastern side where it narrows. The soundings in the entrance are very irregular, and although no dangers were found, care should be taken

in entering. On the eastern shore close to the entrance is a small cove with an island in the middle of the entrance, connected with the southern point by a sand spit covered at high water. The channel for entering is on the north side of the island. The cove has rocks and shoals and affords an anchorage to small craft only. A stream empties at its head with very extensive flats.

On the western shore of the inlet, two miles from the entrance a shoal extends off shore for about 125 yards, but otherwise the channel is clear to the head where extensive sand and gravel flats make off from the southwest corner. On the eastern side near the head are two islands, connected at low water, and just beyond them, with a point on the eastern shore showing between, a good anchorage may had in 10 to 12 fms. soft bottom. A large stream coming from the eastward through a

1717

narrow valley empties in this corner of the head with extensive sand and gravel flats.

Two miles west of Rodman Bay is Tetchani Point, a low wooded point, on the eastern side of which a mountain stream empties forming a very large sand and gravel bar. This flat extends into the channel for over a quarter of a mile, from $\frac{1}{2}$ mile to the westward of the point to below the mouth of the stream. A close approach to the point should be avoided.

Three quarter miles west of Tetchani Pt. is Kismeni Pt. low, covered with a thin growth of trees, bare and rocky at its seaward end. Off this point are two ledges, bare at low water only, with a sunken rock halfway between them and the point. The first is distant 600 yards N. E. $\frac{1}{2}$ E. and the second is distant 800 yards N. E. $\frac{1}{2}$ E. from the point. To the eastward of the point is Kismeni Cove, about $\frac{3}{4}$ of a mile in depth by

less than 1/2 mile at its entrance. This gives shelter from southerly winds, the holding ground in the middle of the cove being fair in 18 to 22 fms.

The course for entering lies toward the eastern point to avoid the ledges off Kismeni Pt.

This bight affords no shelter from northerly winds.

Beyond Kismeni Pt. and Broad Id., Peil Strait opens out into a considerably wider body of water, extending 7 miles to the southward to Pt. Pogibshi, the northern entrance to the narrows, and on its western side opening into three bays, the two northern ones being the most extensive, and constituting Kooriah Sound. To the southward about 3 1/2 miles on the western shore the third bay extends in a curve to the southward for four miles.

Poison Cove near Pt. Pogibshi is the only other indentation on this shore.

From Kismeni Pt. to Pt. Pogibshi the shore

bends in a gentle curve to the southward, the low water line extending some considerable distance offshore. Several anchorages may be had along this shore, the best being near Pt. Pogibshi off the entrance of a small lagoon in a small grassy flat, in 22 fms., sandy bottom. A close approach to the shore should be avoided in anchoring as an extensive sand and gravel bar makes well into the bight.

One mile S.W. by W. $\frac{1}{2}$ W. from Nisimeni Pt. is Otstoria Id., low and thickly wooded, and connected at low water with two bare rocks lying off its southwestern end. A sand and gravel bar formed by mountain streams makes off from the shore towards Otstoria Id. constricting the channel to a width of $\frac{1}{8}$ of a mile. The outer point of the flat is marked by a 2nd class red nun buoy, anchored in 8 fms. A clear channel carrying 4 to 10 fms., generally used by the steamer

20
24

lies between the buoy and Ostroia Id., and a straight course from the buoy to Poverotui Id. clears all dangers.

Three quarters of a mile $W \frac{3}{4} S$. from Nismeni Pt. is the seaward end of Cozian Reef, a sunken ledge extending off Ostroia Id. for nearly $\frac{1}{2}$ mile. Its outer end is marked by a second class can buoy painted black. One half mile $S. W. \frac{3}{4} W$. from Nismeni Pt. and lying 150 yards off shore is a sunken rock poorly marked by kegs.

Five-eighths of a mile W by S . from the southern end of Ostroia Id. are Krugloi and Eleevoi Ids. connected at low water. These islands are small, low and wooded. Between them and Ostroia Id. is a clear channel with from 12 to 25 fms, which is apparently a better one than ~~that~~ ^{that} between Ostroia Id. and the shore, as it avoids Cozian Reef, and the sunken rock between it and the shore.

One and one half miles from Krugloi Id. and nearly on range between it and the northern point of Ushk Bay is a reef, nearly 150 yards long, baring only at Spring low waters.

A little inshore, but nearly on range between St. Emmons, and the north point of Prison Cove is a reef of about the same extent as the last, distant $2\frac{5}{8}$ miles S. $\frac{1}{4}$ E. from St. Emmons and $2\frac{1}{2}$ miles S. W. $\frac{1}{2}$ W from Krugloi Id.

It is $\frac{7}{8}$ of a mile N. E. $\frac{3}{4}$ N. from the southern point of Ushk Bay, and bares at low water only.

One and one half miles SW. $\frac{3}{4}$ S. of Krugloi Id., and $2\frac{1}{2}$ miles N. from Poverotni Id. is the center of a group of reefs, with shallow water between, covering an area of one half mile square. The largest of these is about 300 yards long by from 50 to 100 yards in width, composed of sand, gravel and boulders. This covers only at the highest Spring tides. 400 yards to the southward of this

are two rocks covering at ordinary high water. To the westward of the sandy island about $\frac{1}{4}$ mile, are three ledges covering at about half tide. The white sandy bottom between these ledges, and extending off them for a distance varying from 50 to 150 yards, is visible for a considerable distance on a bright day.

Between these reefs and Porrotni Id. there are no dangers, the water varying from 30 to 50 fms. in depth.

Prison Cove, abreast Porrotni Id. is a small open bight, with low gravelly beaches, and flats at the head that uncover for a quarter of a mile at low water. It is free from dangers and affords an anchorage for small craft in 18 fms. soft bottom.

One and one half mile to the northward is the entrance to Ushk Bay, which extends to the westward and southward for 4 miles

with an average width of $\frac{3}{4}$ mile, narrowing to a third at the point, where it changes direction. It affords an anchorage at the head in from 18 to 20 fms. soft bottom. A peculiar formation of the hills is noticeable near the entrance on the southern shore, and a solitary round topped hill, 1800 feet high with several landslides, marks its northern point and the southern entrance to Kooniah Sound.

Five miles N. by W $\frac{1}{4}$ W. from Toverotui Id., and four miles W. S. W. from Broad Id. is Emmons Id., Pt. Emmons being its eastern extremity. This island was named in honor of Lieut. George Emmons, U. S. A. who has spent many years in these waters and furnished much valuable information in regard to them, and the habits and customs of the Indians in this section of Alaska. The island is well wooded with a small lake on its northern shore.

A ridge in the center, 600 feet high at its eastern end, has the appearance of a cone to vessels coming from Chatham Strait.

Off the western end of Emmons Id. distant one half mile is a group of small, wooded islands, connected at low water, from which a reef, bare at half tide, extends to the northward for nearly 1/2 mile. The passage between the south shore of Kroniah Sound and Emmons Id. should not be attempted as the water is shallow, and long sand spits, visible at low water make well into the channel from the western end of Emmons Id., and the small group of islands to the westward.

Two and one half miles N. N. W. from Emmons Id., a large island 5 miles in length, 1 1/2 miles wide at its eastern end and 1 mile wide at its western end divides Kroniah Sound into two arms. A sand spit, 1/4 mile in length, covered

at high water, with a small wooded high water island near its center, connects the large island with the shore at its western end.

On its southwestern end is a prominent landslide. Off its eastern end a ledge makes off for 250 yards, and off its southeastern point is a ledge distant 250 yards E. S. E., bare at half tide.

One mile to the westward from its eastern end, and $\frac{1}{3}$ mile off the northern shore is a small bare rock, some 8 feet out of water at high tide. The northern shore is low, with sand and gravel beaches which extend off shore 150 to 200 yards for a mile above the bare rock. The southern shore of the island is bold and steep.

Five and one half miles beyond Emuwoods Id. the south arm of Kooriah Sound is divided into a bay, 3 miles long extending to the southwest, and a smaller arm, 2 miles long, that connects with the northern arm at high water.

Three and one half miles above Cummins Id. is a small light, with flats at its head, bare at low water. Off its eastern point is a small round wooded island, connected with the shore at low water, from which a reef extends to the eastward for 200 yards. The southern shore should not be approached too closely, as the low water line extends well out. The bay extending to the southward is clear except for the western shore which is shoal with several sand and gravel bars. The arm at the head connecting with the northern arm, in addition to extensive mud and sand flats, has a low grassy flat, covered here and there by small bushes, extending through on the left of a small wooded knoll to similar flat, $2\frac{1}{2}$ miles above the junction of the north and south arms. In this small connecting arm, $\frac{1}{2}$ mile N. N. W. $\frac{1}{2}$ W. from the wooded island on the sand spit, and in mid channel

is a rock, bare at low water. This rock is about 2 1/4 miles above the southern point of the arm.

The northern arm of Kooniah Sound is comparatively clear, until 1/8 of a mile to the southward of the small island on the northern shore, where in mid channel is a rock, bare at low water. This rock is not quite abreast of a prominent waterfall on the north shore. At the head of the northern arm are two streams, both small, entering from low valleys, one extending in the same general direction as Kooniah Sound, and the other having a more southerly trend. A wooded island, with a reef extending 1/4 mile to the eastward, lies off the point of the ridge dividing the two valleys and is connected at low water with the shore by the flats at the head.

Peril Strait, Point Rogibski to Fish Point.

Scale 1:20,000.

The general description and sailing directions of this part of Peril Strait as published in the Alaska Coast Pilot are excellent, and only such changes as have been found by the present survey in the existing chart will be noticed.

The triangulation, shore line, and hydrography were executed in the same manner as on the other sheets. In the topography, by Ensign A. H. Reuban, U. S. A. the photographic method was used, the contour interval being one hundred feet. This system of topography has much to recommend its use, principally its accuracy and the accumulation of a large amount of data in a short space of time, which is an important feature in many localities where weather and other causes shorten the field season.

For the work of this vessel, where the office work at the end of the season embraces all branches of the survey, the large amount of time required for developing, and plotting, and the lack of facilities for enlarging the views are against

its adoption when compared with the shorter time necessary to fill in the contours by the methods used on the other sheets.

From Pt. Pogibshii to Arthur Pt. no change beyond the completion of the hydrography will be found. Arthur Pt. is an island and a slight change will be seen in the shoreline between it and the northern entrance to Deep Bay. The shoal on the chart between Arthur Pt. and Yellow Pt. was not found, but may exist. The shoal to the southward was found, two points on it having 15 ft. reduced, nearly on range between Arthur Pt. and the spindle off Middle Pt. The rock shown as a rock awash, between Grass Top Id. and Big Id. was found to be a sunken rock. Liesnoi shoal is apparently smaller than shown on the chart and the shoalest water found was six feet abreast, ^{and} to the westward of the buoy.

Between the northern point of Rapids Id. and Prolery Rock, in mid channel a sunken rock was found with but 9 feet of water on it. This channel is never used by large vessels, but the finding of this rock blocks

it up very thoroughly.

On West Francis Rock several shoal soundings were found, the least water being nine feet, and the shoal depths give an area of about 25 yards square.

East Francis Rock on the chart is marked by six feet but the shoalest water obtained, was 15 feet, with two seventeen foot depths close aboard.

In Sulovia Bay two sunken rocks, one close to Sulovia rock and the other close to the rock a wash near Sulovia Split were found, but these are apparently only extensions of their respective ledges and are hardly to be considered as dangerous to navigation.

Current observations for velocity, set, and time of change were taken at the northern and southern rapids, full records of which have been forwarded.

Names on Sheets which are not on existing Charts.

These names have been obtained from Lieut. Geo. Emmons, U. S. N. and Mr. Joseph Zuboff of the Alaska Oil and Guano Co., who have given Indian and Russian names on the tracings which are forwarded with the sheets.-

Chatham Strait.

Cascade Bay, so called on account of prominent
Cascade at its head.

Warm Spring Bay, translation of Indian name, so
called on account of warm springs near
its head.

Ta-katz Bay and Ta-katz Id., Indian names, meaning
"stonewall" from the steep cliffs that surround
the bay.

Point Turbot, named after a triangulation signal
of the season of 1895, not in local use.

Point Wilson and Wilson Cove, so called by em-
ployees of Alaska Oil and Guano Co.,

after the Captain of one of the company's
fishing steamers.

Cha-ik Bay, from the Indian name, in local use.
Kooz-Bay, from the Indian name, translation
'bear', and improperly called Woods Bay
on the chart, in local use.

Kootznahoo Inlet, from the Indian name, Kooz
meaning 'bear' and 'nahoo' nest, strong-
hold, or place infested or frequented by. In
local use, improperly called Kootznahoo.

Kelp Bay, North and South Points from their situ-
ation, not in local use.

Pond Island, from the two ponds or lagoons on the
island, not in local use.

Yellow Rock, so called from its general color.

Crow Island, from the Indian name meaning
a breeding place for crows, not in local use.

Plover Rock, from the number of plover that were
found there, not in local use.

Portage Pt. and Portage Arm, from the portage
which connects by this arm with Peril Strait.
Locally known as the portage.

Middle and South Arm from their relative positions
to Portage Arm, not in local use.

Basin, from the resemblance caused by the surround-
ing hills, not in local use.

Peril Strait.

Dead Tree Island, from the standing dead timber,
not in local use.

Sa-ook Bay, from the Indian name, meaning
"late salmon", not in local use.

Rodman Bay, for Lieut. Rodman, who was the
first to reconnoiter and survey it, not
in local use.

Emmons Island and Emmons Point, after
Lieut. Geor Emmons, U.S.A. not in local use.

UsnK - Bay, from the Indian name, translation
not known, not in local use.

Very respectfully
C. A. Moore

LIEUT. COM'D'R U. S. N. COM'D'G U. S. C. & G. S. PATTERSON.