**Form 504**

**U.S. COAST AND GEODETIC SURVEY**

**DEPARTMENT OF COMMERCE**

**DESCRIPTIVE REPORT**

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**LOCALITY**

- **State**: Alaska
- **General locality**: Seward
- **Locality**: Cordova Bay

**CHIEF OF PARTY**

E. F. Lichten

**LIBRARY & ARCHIVES**

**DATE**
Department of Commerce and Labor
COAST AND GEODETIC SURVEY

O. T. Tidemann
Superintendent.

State: Alaska

DESCRIPTIVE REPORT.

Locality: 

[Handwritten text: "Caliagonia Bay"
"As Cordova Bay"]

1907

CHIEF OF PARTY:

E. T. Dicinos
Description of Anchorages and Coast Pilot Notes,

West coast of Prince of Wales Island,

South-eastern Alaska

1907.

By Party on Steamer "Godney",

E.F. Dickinson, Assistant,

Commanding.
Anchorage along the West coast of Prince Of Wales Island.

AUGUILLA HARBOR:

On the North side of Aguilla Island, opposite Heceta Island on the Western side of the Bocas de Finas:

In entering give Bush Top Island a berth of from 100 to 200 yards and stand in on a Southerly course anchoring in from 12 to 15 fathoms, soft bottom. Good for all winds.

NORTH SIDE OF SAN JUAN BAUTISTA ISLAND:

Between Aguesa Point and the point to the Westward of it, a shallow bight gives a fair anchorage for Easterly and Southerly winds, anchor close in shore in from 15 to 20 fathoms, soft bottom. Not good for Western or Northerly winds.

PORT ESTRELLA:

This bay is an indentation in the shore of Prince of Wales Island about two miles deep, Cape Flores forms its Western entrance point. In entering favor Joe's Island (which forms Cape Flores) until passed the cabins on the main island point, on an E.S.E. course to avoid the halyard patch making of from the little island on the Northern side of the Bay, then stand ever to the North side or to the head of the Bay, and anchor in either place in from 8 to 12 fathoms, soft bottom. Good for all winds.

PORT CALDERA:

An indentation in the shore of Prince of Wales Island about 5 miles to the North-easterward of Cape Flores. Enter in mid channel on a South-easterly course and anchor near the head of the Bay in from 12 to 15 fathoms, soft bottom. Good for all winds.

ADRIEN COVE:

A small bight on the North-eastern shore of Suemez Island, opposite Cape Flores. It affords a good anchorage from all winds in the S.E. corner of the cove in from 10 to 12 fathoms, soft bottom.
MEARES ANCHORAGE:

On the North side of Ulloa Channel opposite Meares Island,
Enter on either side of the small island lying on the Northern side of the
channel. The anchorage is at the entrance of a small passage (formed by an
island) about 400 yards South-easterly from the main shore of the Prince of
Wales Island, in about 15 fathoms, soft bottom. Care should be taken to avoid
a rock, marked with kelp, lying about 160 yards from the Wasterly point of
anchorage, in a South-westerly direction.

NORTH BAY:

An indentation in the Eastern shore of Dall Island about 3-1/2 miles
to the Southward of Tlevak Narrows, it extends into the island about 1-1/2
miles in a S.E.W. direction. The head of is divided into two small bights by
a high water island. In entering favor the S.E. side on account of the reef
making off the N.W. entrance point towards mid-channel and anchor near the
head of the bay in about 12 or 15 fathoms, soft bottom, the point of the above
named high water island bearing about W.S.W. Good shelter from all winds.

FARALLON BAY:

On the Western side of Tlevak Strait, about a mile to the Southward
of North Bay, making in to the Eastern shore of Dall Island for about a mile
in a S.W. direction. Enter in mid-channel and anchor near head of bay in
from 12 to 15 fathoms, soft bottom, a small high water island lying near the
head of the bay should bear about S.E. Care must be taken to avoid two
rocks, which cover at half tide, lying about 300 or 400 yards off the Wasterly
point of entrance, in an E.N.W. direction.

BREEZY BAY:

An indentation in the Eastern shore of Dall Island, on the Western
side of Tlevak Strait, about two or three miles to the Southward of Farallon
Bay and nearly opposite the Nichols Islands. It is quite a large bay divided
into two arms by a point near the middle. There several small islands and
numerous rocks and reefs in the bay. It does not appear to afford any anchorage.

BALLY BAY:

A large bay in the Eastern shore of Dall Island, on the Western side of Tlevak Strait opposite the McFarland Islands, it is divided into two large arms and two smaller bights by projecting points. The largest and Western most arm is called False Lead and View Cove, on our charts. A group of small islands lie near the middle, between the two entrance points, Reef Point to the Northward and High Point to the Southward. A rock which covers about half tide bears about N.S.E. distant about half a mile from Reef Point. The Bay has not been examined and its use is not recommended.

ROSE INLET:

On the Western side of Tlevak Strait and nearly opposite Square Island, taking into the Eastern shore of Dall Island for about a mile in a Southerly direction then turning W.S.W. for about 1-1/2 miles with an average width of about a mile. There are several islands a little inside the line between the two entrance points, with apparently clear channels between them. Near the head of the Bay several small rocks were seen, but the Bay has not been carefully examined.

VESTA BAY:

On the Western side of Tlevak Strait, about a mile to the Southward of Rose Inlet, and nearly opposite Grand Island, runs into Dall Island for about a mile in a South-westerly direction, a mid channel course appears to be clear, the anchorage near the head of the Bay is cramped, in 16 or 20 fathoms soft bottom.

GRACE HARBOR:

On the Western side of Tlevak Strait, about a half a mile to the Southward of Vesta Bay, and extending into the Eastern shore of Dall Island for about a mile in a South-westerly direction, In entering, give Grace Point,
the North western entrance point a berth of about a quarter of a mile to
avoid the rocks making out from the point in a Southeasterly direction, then
stand in for the inner bay or basin keeping mid channel and anchor near the
middle of the basin in from 10 to 15 fathoms soft bottom.

A Salmon Saltery is located in the S.W. corner of the inner basin and
a flat makes out from 150 to 200 yards from the mouth of the creek.

The Southwesterly winds seem to draw through a low divide from the
Ocean.

KASOCK INLET:

Making into the Southern shore of Sukkwan Island about two miles to
the Westward of the S.E. Point of the island, The entrance is blocked by a
couple of small islands lying close together with a good clear channel on
either side. A bout a quarter of a mile inside these islands the Inlet is
divided into two arms, one making in a North-westerly direction for about
1-3/4 miles, the head of this arm forms a bay about 1/3 by 1/2 a mile in
diameter, with good anchorage in the right hand side of bay in about 12 fathoms
soft bottom, keep mid channel in going through the narrow part of the channel
leading to this bay. The other arm runs Northerly for about one mile into
a good sized bay about a mile in diameter, with a short arm turning to the
Eastward for about one quarter of a mile. Anchor just inside the entrance to
the short Easterly arm, in about 15 fathoms soft bottom.
CAPE LYNCH:

Is the prominent point at the Western extremity of Heceta Island and forms the Southern point of entrance to Daviéson Inlet and the North-eastern point of entrance to the Bocas de Finas, the inside channel leading to the Southward. Foul ground extends for about 3/4 of a mile to the North-westward of the Cape. The channel to the Southward passes from a 1/2 to 3/4 of a mile to the Westward of the Cape, about half way between it and the Gull Island reefs.

WHITE CLIFF:

Is a very prominent white cliff on the Western shore of Heceta Island, about 4 miles to the Southward of Cape Lynch, the channel passes from a 1/2 to 3/4 of a mile off the cliff and between it and the outlying rocks and reefs to the Westward.

BOCAS DE FINAS:

Is the channel or passage between Heceta and Aguilla Islands, the portion to the Southward of White Cliff appears to clear of dangers, but between Cape Lynch and the Cliff there are numerous rocks and reefs through which the channel passes, when the survey is completed good courses can be given and the dangers avoided but at present it is not safe for a stranger without a pilot.

About a half a mile to the Southward of Point Desconocida there is a rock which is awash at extreme low tide, it is generally marked with kelp, there is deep water between it and the point.

GULF OF ESQUIBEL:

Is quite a large body of water bounded on the Westward by Aguilla, San Pedro and Noyes Islands, it has several outlets to the Ocean but they have not yet been examined. The Gulf is about 8 by 8 miles in extent and is apparently clear of dangers except close along the shores. About a mile to the South-westward of St Philip Island there is a reef marked with kelp
which should be looked out for on the course from Bocas de Finas to San Christoval Channel.

PORTILLO CHANNEL:

Between San Fernando and Gertrude Islands is foul and should be avoided until a careful examination is made.

SAN CHRISTOVAL CHANNEL:

Is divided into two channels by a group of islands the one to the Southward of the islands is now generally used and the dangers in it are marked by kelp but they are quite numerous and great care should be taken in passing through. I am of the opinion that an examination will prove the channel to the Northward of the Rosary Islands to be the best.

The cluster of rocks shown on Chart No 8150 as lying in the Western entrance of the channel about 3/4 of a mile to the Northward of Palisade Point do not exist.

SAN ALBERTO BAY:

There are several kelp patches between San Christoval Channel and Parida Island, the courses given will clear them but a sharp lookout should be kept.

Balandra Shoal and Fern Reef have not yet been carefully examined and no description can be given at present.

The channels on both sides of San Juan Bautista Island seem to be clear, but the one to the Southward of the Island is generally used, passing between Balandra Shoal and Fern Reef and then between Angueda Point and Balandra Island.

ULLOA CHANNEL:

Extending from Cape Flores to Tievak Narrows, a mid channel course through seems to clear all dangers, care should be taken in rounding Cape Flores at the Northern entrance to the channel as a reef seems to extend off the Cape for about half a mile to the Northwestward.
TLEVAK STRAIT:

Extends from Tlevak Narrows to Hovkan Narrows, a distance of about 25 miles. There are numerous islands and rocks lying in the Straits and it impossible to give a satisfactory description of them until the Survey is completed. The courses given will clear all dangers, but a sharp lookout should be kept, the reefs are generally marked with kelp.

In going from Tlevak Strait to Cordova Bay, the channel along the Southern shore of Sukkwan Island seems to be clear, and the passage both North and South of Jackson Island is clear.

SUKKWIN STRAIT:

Although there seems to be not less than 3 or 4 fathoms in the channel it is rather contracted and complicated and should not be attempted without a Pilot.
Coast Pilot Notes, courses magnetic, distances in nautical miles.

From Cape Pole to Klawak Cannery, (distance about 40 miles)

Cape Pole bearing N.E. 3/4 E., distant 1 mile.

Cape Pole abeam, steer S.E. 3/4 E. for 11 miles.

Cape Lynch abeam, steer S.E. X E. 1/2 E. for 2 1/2 miles.

Dead Tree Point abeam, steer S.E. for 3/4 of a mile.

White Cliff abeam, steer E.x N. for 3-1/4 miles.

Bush Top Island abeam, steer E.x S. for 2-1/4 miles.

Aguila Point abeam, steer E.x S. for 2-1/2 miles.

West Channel Id. (W.Pt.) abeam, steer E.x S. for 3/8 of a mile.

Black Rock abeam, steer E.x N. for 1/2 mile.

N.Pt. San Fernando Id. abeam, E.x E. for 1/2 mile.

N.Pt. East Channel Id. abeam, steer E.x E. for 3-1/2 miles.

Parida Id. distant 1 mile on starboard beam, steer E.x S. for 1-3/4 miles.

Fish Egg Id. steer E.x N. for 1/4 of a mile.

Klawak Reef, on port beam, steer N.E. for 1-3/8 miles.

Entrance Point abeam, steer N.1/2 W. for 3 miles.

N.Pt. Klawak Id. rounding in to Cannery wharf S.E. X S. for 3/4 of a mile.

From Parida Island to Cordova Bay.

Parida Island as above distant one mile on starboard beam,

steer S.E. X S. 1/2 S. for 3 miles.

Balandra Id. under Knob Mt. (E.side Pt. Caldera) steer S.E. X E. for 1-1/4 miles.

W.Pt. Balandra Id. abeam, steer S.E. X E. for 1-3/4 miles.

San Juanita Id. and Cape Flores open, c.c. South for 5 miles.

Cape Flores abeam, steer S.E. X S. 1/2 E. for 4-3/4 miles.


Heceta Island abeam, steer East for 1-1/4 miles.

Heka Point abeam, steer N.E. for 6/8 of a mile.
Turn Point, abeam, steer S.E. x E. 1/4 E. for 1/3 of a mile,
Block Island, abeam, steer S.E. x E. 1/4 E. for 1-1/2 miles,
Three Tree Islet, abeam, steer S.E. for 1 mile,
Mid Channel position off North Bay, steer S.E. x E. for 4-1/2 miles,
S.E. Pt. Nichols Id. abeam, steer S.E. x E. for 6-1/2 miles,
S.E. Pt. McFarland Id. abeam, steer East for 6-3/4 miles,
S.E. Pt. Sukkwan Id. abeam, steer East for 1-1/2 miles,
E. Pt. Jackson Id. abeam, steer EAST for 3/4 of a mile,
Lacey Island, Cordova Bay.

Going towards Hwkan,
Position 1/2 mile S.W. from McFarland Id. steer S.E. for 4-1/4 miles,
Square Id. 1/2 mile on port beam, steer S.E. for 1 mile,
Bushy Id. distant 1/2 mile on starboard beam, steer S.E. x E. 1/2 E. for 3-1/4 miles,
Dead Pine Id. reef, abeam, steer S.E. x E. 1/2 E. for 1/4 of a mile,
Pond Rock, abeam, steer S.E. x E. 1/2 E. for 3/4 of a mile,
East point Channel Island,

This course leaves the reef making off to the North-eastward from
Dead Pine Island and Pond Rock to the South-westward and the Kelp patch
(1/3 of a mile from the East point of Channel Island) to the North-east.
It appears to be a clear channel with good water but without the kelp showing
it may be a little narrow unless the lead is kept going.

The following is apparently the best channel:
Bushy Island, as above, steer E. x S. 3/4 S. for 3-3/4 miles, this course heads
for the N.E. shore passing about 1/2 to 3/4 of a mile to the Westward of
Kelp patch, then steer S.E. 3/4 S. for 4-1/2 miles,
East point of Channel Island.
Through Sukkwan Strait.

From Tlovak Strait to head of Hatta Inlet,

Mid channel position off North Bay, steer S.E. x E. for 3/4 of a mile,

Guide Island abeam, steer East 1 mile,

Halibut Nose abeam, steer East for 3-1/4 miles,

N. Nichols Island abeam, steer E. x S. for 1/2 mile,

Island and landslide in range, steer E. 1/2 N. for 1-1/4 miles,

Turn Rock abeam, steer N.E. 1/4 E. for 1 mile,

Grassy Rock abeam, steer N.E. 1/4 E. for 1/2 mile,

Between two islands, steer N.N.E. 1/4 E. for 1/4 mile

Rocky Point abeam, steer N. 3/4 E. for 3/4 of a mile, (favor East shore)

Island Point on port side, steer N.N.W. 1/2 W. (keep over to West shore give small islands a berth of 25 yards)

Reef Island abeam, steer N.E. 1/4 E. for 1/4 mile,

Island on port side abeam steer N.E. 1/4 E. for 1/4 mile,

Island on port side abeam, steer N.E. 1/4 E. for 1/4 mile,

Island point on port side abeam, steer N. 1/2 E. for 1/4 mile,

Sukkwan Village, rounding easily in mid channel, S.E. x E. 1/2 E. 1-1/2 miles,

Small Island abeam, steer S.E. x E. 1/2 E. for 3/4 mile,

Saltcreek Point abeam, steer E. 1/2 N. for 3/4 mile,

Island on starboard hand abeam steer E. 5/8 S. for 4 miles,

Island on port hand abeam, steer E. 3/4 N. for 1-1/2 miles,

Eek Point abeam, steer N.x E. 3/4 E. for 1-1/2 miles,

Eare Rock Point abeam, steer N.x W. 1/2 W. for 1-1/2 miles,

Mountain Point abeam, steer N.W. 1/2 W. for 4 miles,

Corbin Point abeam, steer N.W. x N. 1/4 N. for 2-1/4 miles,

Dell Island abeam, N.x E. 1/4 E. for 1-1/2 miles.

Suizer,

The above courses give Turn Rock a berth of from 200 to 300 yards.
Grassy Rock 150 yards, take mid channel between the two island points, then follow the Eastern shore after passing Rocky Point at a distance of 100 to 150 yards off. When the point of the island on the opposite side of the channel is abreast stand accross the channel towards the North side to avoid the reef making out from Reef Island towards the channel and favor the islands on the port side giving them a berth of from 25 to 30 yards. Pass the old Sukkwan Village in mid channel and round on easy port helm to avoid kelp patch on starboard hand.

There is very little tidal current in Sukkwan Narrows.

Tides and currents in Tlevak Narrows:
The first 4 hours of flood and the last 2 hours of ebb set to the Southward,
The first 4 hours of ebb and the last 2 hours of flood set to the Northward.

Slack water occurs about 2 hours before High and Low water as given by the Tide Tables for Sitka.

During Spring tides there is hardly any slack,
During Neap tides there is from 10 to 30 minutes slack with weak currents for about an hour on either side.

During Spring Tides the current has a velocity of about 8 or 9 knots an hour.
The triangulation points were plotted with a three arm protractor and the topography sketched by aid of sextant positions and sextant cuts, the party working rapidly in order to keep up with the triangulation party. In places where it was impossible to get sextant positions the topography was sketched by course and distance while running in a small steam launch.

The two rocks at north entrance to Portille Channel are large and about 4 feet above high water. The rock at south in Portille Channel is large and about 3 feet above high water.

There is no portion in the topographic record for the half patch in the north entrance.
to Tortelle Channel, but the approximate position is given it on the chart as it was seen by the triangulation reconnaissance party.

The rocks off St. Philip Island on the Gulf of Esquimalt are bare at low water. The rocky reef about a mile west of the witnesses and the one about 1/4 mile north of Davida Island in Fat Albert Bay are bare at all stages of the tide.

Cement is on a large grass covered rock about 20 feet above high water.

Angelique, Philip, and Mobe are on large rocks.

Rock about 1/4 mile south of Davida Island is bare at low water.

Fern Rock is at low water.

A fish is on a long rocky ledge about 4 feet above high water.

A fog is on a large rock about 8 feet above high water.

A post in Tortelle Channel is on a rock about 3 feet above high water.

A Tul is on a rock about 2 feet above high water.

A Toul is on a long rocky reef about 4 feet above high water.
The mid-channel rock about a mile north-east of Ignace Island is about 75 meters in circumference and about 6 feet above high water.

Rock, about 1/2 mile north-west of Point Rosalia in Gulf of Esquimalt rises at low water.

The island about 15 meters south of 1/2 mile in Tortillo Channel is small and wooded.

The island off Sword Point in Tortillo Channel is heavily wooded, a long low rocky spit running out from the west end. A channel is located on this spit.

Tortillo Channel is foul.

On entering St. Philip Island Anchorage from the southward, the large mid-channel rock (about 10 feet above high water) was left to starboard, passing between the rock and the island, nearing the rock.

A tuft in Escolar Channel is on a green-top rock about 2 feet above high water.

A few sounding lines were run over Balandra Shoal. From a tidal prediction and reduction by the Tidal Division the least water found was four feet.

Ballesta and Balandra Islands are heavily wooded.

New Guinarte Island is a small wooded island.
south of San Juan Baptista Island.

The Cabras Islands in Buccaneer Bay are wooded.

The two San Adrian Islands on the west side of Ullas Passage are wooded.

A help is on a rock about 2 feet above low water.

Rocky reef off south-east point of Meares Island is bare at all stages of tide.

A Moss is on a small wooded island.

A Log is on a small island with a few scrubby trees in center.

A Isle is on a small wooded island.

The large rock about ½ mile south-west of log is bare at all stages of tide.

Block Island is heavily wooded. The passage on the east side of Block Island is foul.

A Mud is on a small wooded island.

A Round is a low, round, bushy tree on a small island.

A Bun is on a small wooded island.

A Reef is on a large rock which comes at high water.

A Guide is on Guide Island, a small wooded island in Nez Perce Strait.

A Mac is on a small wooded island, probably Sentry Island.
A Turnie is on a large rock, about one foot above high water.

A Ark is on Turn Rock, a rock about 4 feet above high water at the entrance to Techewan Strait.

A Lap is on a large rock, about 6 feet above high water. The large rock east of it is one on which Station is located is about 100 meters long, 20 feet high, and covered with low weeds and brush with a large spruce tree on the east end.

A Sentinel is located on a small wooded island. The rock about 1/2 mile south-east of Reef Point is covered at high water.

A Cut is located on one of three large rocks from 10 to 20 feet above high water.

A Nice is located on one of a group of small wooded islands. The rocky reef south-east of Station Nice is bare at all stages of tide.

A Shoe is located on Shoe Rock, about 15 feet above high water.

A Hey in Techewan Strait is located on a small grass covered island.

A Houkan is located on a small island with a few trees in center.

A rock in Techewan Strait between a shoal...
and is bare at all stages of tide.

Rock about ¼ mile south of Grace and Grace

Harbor is bare at all stages of tide.

Square island is heavily wooded.

The country from St. Regis Bay to Cordova Bay

is montaneous and heavily wooded. It was neces-

sary to follow the water courses with the

triangulation scheme as all the hills are-

heavily wooded. Many of the trees, having an

insecure hold in the thin layer of soil cov-

ering the rocky surface of country, blow down

or die, making it almost impossible to punctate

the woods, which are composed mostly of spruce

trees.

The shoreline is all rocky, with few exceptions

all the triangulation stations for the reason

are marked in solid rock.

The numerous islands along the shore are

high and wooded.

There are no runs, only an occasional retreat

from the mountains.

The country is sparsely inhabited, the few

Indians comprising the population are clus-
tered in the small villages and work for
the Salishan Canneries.
At Cashel Village is composed mostly of native houses on the east side of the small inlet, also a church and a school house. On the west side of the inlet there are a few native houses; a salmon cannery, two or three houses for employees of the cannery, and a large general merchandise store and post office.

At Newcan Village there is a church and a school house and the remainder of the village is composed entirely of native houses.

At the office, Washington, a projection, scale 1:100,000, was made. The triangulation stations plotted on it by D.M.s and D.T.s. from field computations, and the topography adjusted to it. In the field at each triangulation station a sound of angles was taken to islands, reefs, points, etc. These cuts were plotted on the new projection and used as far as possible in adjusting the topography. In the case of long cuts to distant objects the azimuth of the initial line was laid off and used with protractor to prevent error. In addition to this the pertinent positions recorded in the topographic records were plotted and used as far as possible to adjust the topography. In many cases both in triangulation and topographic records, the
The mountain peaks were plotted on the new projection from the triangulation records with a three arm protractor. The azimuth of the initial line was laid off to prevent error.

Description of anchorages, channels, currents, etc. are dealt with in Assistant Drummer's "Description of Anchorages and Coast Pilot Notes."

The following is a list of most of the changes made in adjusting the topography from cuts and positions from the triangulation and the topographic records:

San Pedro and North Islands changed to suit on cuts. It was necessary to change considerably.

Size and shape of San Pedro Island.

Emerald Island doubled to suit on cuts.

The line from a level to a point on San Carlos Island 'Channel known to be open, as slope' Island was coming to eastward, necessary to make smaller on the west side the island on which Back and Spur are located.

Reef along Hecate Island there nearly half
way from a make to a lynch, lightened to fit on cuts.
Reef south of a teather made longer to acclihend to fit on cuts.
Reef east of a Bell Rock placed from on cuts.
Reef south of Emerald Island moved slightly to northwest to suit on cuts.
"Crack" Island lightened to suitward to fit on cuts.
Small reef north east of a teather placed on sheet from on cuts.
Two small reefs near a Bell Rock placed on sheet from on cuts.
Small reef 2000 meters south of a teather placed on sheet from on cuts.
A small island about 300 meters off the north west shore of Anguilla Island and about 5 x 6 (true)
If 1 turn made longer to fit on cuts.
Small islands at a Bob changed to open due to a summer.
This line known to be open inside the small island
a short distance east of a Bob.
Island off north west point of Anguilla Island
swung to south ward to fit on cuts.
North west point of Anguilla Island swung
to southward to fit on cuts.
Island near and west of a Moke enlarged a little.
Culdees Island changed to fit on cut.
S. Philip Island changed to fit on cut.
The three islands 3500 meters north east of Squeeze shifted to suit on cut.

Necessary to change vicinity of Howtham considerably.

Rock between shoal and ship in Kanges Strait shifted to suit on cut.

Size and shape of channel Islands near Howtham Village changed to suit on cut.
North end of these Island changed to fit on cut to Squeeze Island made smaller to suit on cut.
Small island east of cent made smaller to suit on cut.

"Ace" Island in Kanges Strait lengthened to fit on cut.

Point at west entrance to Kasook Inlet lengthened to fit on cut.

Islands at entrance to Kasook Inlet are too large but will not changed as it is known that Kasook Inlet was wholly silted and changing them would change the relation existing between them and the inner entrances to the inlet.

"Fish" Island changed to fit on cut. Necessary
to change shape, making it narrower.

Reef S.E. side shortened on east side to suit on cuts.
Not able to identify cuts to islands near reef, as they were marked as sketches on original sheet.
Point of Long Island 1500 meters north of a ship
swimming to northward to fit on cuts.
Action Island lengthened to northward to fit on cuts.
Small islands north of Action Island changed
to suit on cuts.
"Rice" Island changed to fit on cuts.
The entrance to Suhkwan Strait sketched from
memory having made reconnaissance and built
on signals there.
Point Boona elongated to southward to suit on cuts.
Small islands 1500 meters south-east of a cut changed
to suit on cuts.
Small island 400 meters west of a bank made smaller
to suit on cuts.
Square Island made smaller to suit on cuts.
Island 600 meters east of a cut made smaller to suit
on cuts.
Rock point of Boona Point shifted to intersecting on
on cuts.
Island north of bank at entrance to Suhkwan
Strait changed to fit on chart.

Two large islands east of Fort Island enlarged and shifted and the two smaller islands about 200 meters north of these shifted to fit on chart.

Islands north-east of MacFarland Island shifted to fit on chart.

Fort Island enlarged to north-eastward to Lago cut.

Small islands east of Mac shifted and rock-placed among islands from on chart.

A small indentation made into shoreline a few meters east of a fort at entrance to Takhawal Strait known to exist.

A small island placed on chart about 100 meters east of a cap at entrance to Takhawal Strait known to exist.

Island east of Reef enlarged to fit on chart.

Island, on which Sun and Able are located, enlarged. Both are known to be on same island.

Island north-east of Sun enlarged to fit on chart.

Two small islands east of Guide shifted to fit on chart.

Point at south entrance to Leda Bay shifted to northwest to fit on largest cut.
Large island north-east of a Mud (shifted to fit on tangent cut).

Small islands north of beak remain as sketched in field, cates could not be identified.

Alboj Island in Albo Passage changed to fit on tangent cut.

Island on which be Mud and Rau are located, changed to fit tangent cut.

First point west of a Big more to northwest to fit on cut.

South side. Maree Island changed to fit on tangent cut.

Maree Passage changed considerably. Points placed on sheet from on tangent cut.

Island on which say Rau and Edge are located, changed slightly to fit on cut.

This is an island only at an extremely high water, joined to Strong Island by a bare shore of sand and rock.

Position of two small islands in Portell Channel south-east of a Mud, changed, line to is what from a Mud known to pass between the two islands.

Small island in Portell Channel south-east of a Mud made smaller as line from a Mud to sail is known to pass over the rocky point on the
north-east end.

* Ignace Island changed to fit on cuts.
* Name of a Block on Block Island in Terrekl Narrow not put on sheet, no room.
* Point in Post Refuge changed to fit on cuts.
* Point Boreas made smaller on west side to fit on cuts.

* Rocks about 400 meters north of Isil in Tortilla Channel put on sheet from on cuts.
  * Rocks about 900 meters north of a Jet in Tortilla Channel put on sheet from on cuts.

* Rock about 2000 meters north-east of a Jet on Ignace Island put on sheet from on cuts.

Unable to identify cuts to points north-west of Buff in Terrekl Strait, no points remain as sketched in field.

Not able to identify cuts to islands north and north-east of the Farland Islands.

* North shore of Shemya Island in Bucareli Bay changed to suit on cuts to the four principal points.

* Rocks in Bucareli Bay north-west of an Entrance changed to suit on cuts.
* Cabras Islands in Bucareli Bay changed to suit on cuts.
The island in Tortilla Channel on which a claim is located was made larger to fit in an area.

Two rocks placed on sheet: one at entrance to Tortilla Channel south-west of 170.

One rock placed on sheet north-west of 170.

Rock south-west of Whit placed on sheet from...
Unable to identify all cuts to reefs, islands, etc.
Mark of Ignace Island, as marked nearly as sketched in field, reefs which could be identified were placed on sheet.

Shoreline went off east coming to westward to place it inside of a cut from sheet to tangent of Ignace Island.

Placed on sheet from san cuto a rock off point of Lemoy Island about 5 miles 6° 18' E (true)

of Ignace.

Necessary to change north end of Ignace Island to fit in tangent cuts. Portalis Channel and vicinity of Ignace Island very much off from scale, making the adjustment more difficult.

Point of San Juan Bartesta Island between 3 Bay and 4 Monk coming out to westward to fit in cut.

Witness Islands in San Alberts Bay changed to fit in cut.

Reef south of 5 Ball in San Alberts Bay placed on sheet from san cuto.

Reef north west of 5 witness placed on sheet from san cuto.
Points of fish egg island lengthened to fit on
languit auto.

Not able to identify auto to island west and
northwest of a feature and to islands northwest
of albert island.

Island northwest of a feature in the charted channel
changed to fit on auto.

St. Philip island in Gulf of Esquibel changed
to fit on auto.

Small island west of a Pasqual in Gulf of
Esquibel shifted to westward to fit on auto.

Three small islands south-east of a Philip
shifted to fit on auto.

Rocks off the north-west side of San Fernando
Island placed on sheet from topog record.

Point Rosalia on north coast of San Fer-
mano island located by position from topog
record.

Point south-east of a Pasqual shifted
to fit on auto.

South side Bob " island forced to north-
word to open lead a Bob to S Inner.

Necessary to change islands at s done to suit
on auto.

Changed west side of island on which triumph
and a Ball are located to fit in cut.

Changed sage of Rarada Island to fit in cuts.

Changed island on which a tide is located to fit in cuts.

Island on which a Allen is located changed to fit in cuts.

Coronado Islands changed to fit in cuts.

Rief placed on sheet from an out, see chart, northwest of a lighthouse.

Robbin Island changed to fit in cuts.

Not able to identify cuts to islands in Iota

Pres Vision Bay, as made as sketched in field.

Madre de Dios Island away to suit an out.

Small island placed on sheet from an out

north east of a Madre.

Points east of a Trouble adjusted to an out.

and point placed on sheet with broken line to suit

an out.

East side of San Juan Delota Island changed to fit an out.

Point on St. Nicholas Harbor lengthened to fit

cuts from topog. record.

It Sawalk Inlet was oriented with the cut to

cause face taken on in day topog. record to

Rock off point point north east of small island
in entrance to Fort Estrella placed on sheet from topos record.

1. Sonit 800 meters west of a crumble placed on sheet from topos record.

2. Bare rocks 600 meters north-west of site from topos record.

Unable to identify. All extra to points on south end of large island about 2000 meters est of D. Albret in San Albret Bay. Entrance Point lengthened to fit cuts from topos record.

Small island about 500 meters south of the anchorage site of Tusk Egg Island, known to be a high water island.

Bare rock south of San Adrian Islands in Ulloa Passage from topos record.

Rocks in Means Passage plotted from topos record.

1. Hole patch in channel between a Big and a small near Tusk Narrow plotted from topos record, page 51, vol. 1, denoted on hydrographic chart of Tusk Narrow.

Small island few meters south of a lane in San Christmas Channel moved to northward to open blue & Spar to a Ball. This line known to be open.
Help patch off rear of at south entrance to Boca de Tiucas. Plotted from topog. record.

Point de Arconada—lengthened to south-east to position from topog. record.

Culea Island in Gulf of Esequibe changed to fit topog. cuts from a squeeze.

Unable to plot all help features in San Christoval Channel on such small scale.

Shoreline east of Culea in Illave Passage changed to fit two positions from topog. record.

Help patch south of Culea plotted from topog. record.

Point north-east of cut at entrance to Illave Narrows forced inland to suit topog. record position.

North Bay adjusted with a cut to a flag at the head of the bay, known to have been on the small island at head of bay.

Development of Alberta reef in Saw Alberta Bay, Pages 22 and 23, Vol 3. Topographic Recorder, was not plotted on topog. sheet, scale to small.

Shoreline between 2 jumps and a Boca in Illave Strait was changed to suit topog. positions which plotted back of shore line. Same is true with regard shoreline between Tag 4 and Grace Harbor in Ray and Strait.
Shoreline of Jackson Island was changed between a ten and a jack and a rock placed off shore a few meters from topographic record.

Most of the lettering on the new projection was put on in pencil so it was considered that an office draughtsman could do it more swiftly and better than one of the field force.

To the

Respectfully submitted

Superintendent

American River and Pacific Survey

Assistant, C & G Survey

Washington, D.C.

January 23, 1908.