



3626

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

R. & D. Clarke

L. & L.

DEC 23 1916

Ass. No.

E. Lester Jones
Superintendent.

State: *Alaska*

DESCRIPTIVE REPORT.

Topographic Sheet No. *3626*

LOCALITY:

Stikine Strait -

Woronkopski Id. & Vicinity.

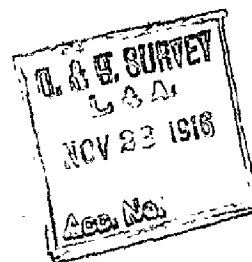
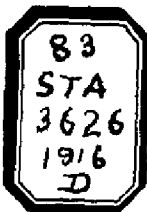
1916

CHIEF OF PARTY:

J. A. Daniels

11-4646

3626



DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET NO. 3626.

WORONKOFSKI ISLAND, EAST SIDE of ZAREMBO ISLAND,

and

NORTH SIDE of ETOLIN ISLAND, ALASKA.

Surveyed Under Instructions from the SUPERINTENDENT

Dated Feb. 26, 1916.

Season of 1916, June to October.

Wire Drag Party No. 3

John A. Daniels, Asst., Chief of Party.

Topography by Revoc C. Briggs, Aid.

Descriptive Report to accompany Topographic
Sheet No. D of WORONKOFSKI ISLAND, East Side of
ZAREMBO ISLAND, and North Side of ETOLIN ISLAND.

SCALE and LIMITS.

The topography on this sheet is done on a 1-20,000 scale and is included between parallels 56-16 and 56-30 North and meridians 132-24 and 132-42 West. The sheet contains forty-four statute miles of shoreline.

GENERAL DESCRIPTION.

The territory shown on this sheet incorporates all of Woronkofski Island, the shore line of Zarembo Island from Round Point to South Craig Point, and the shore line of Etolin Island bordering on Chichagof Pass.

Woronkofski Island presents to view steep, thickly-wooded slopes and shoulders surmounted by several comparatively bare summits. The timber begins to thin perceptibly at a height of about twenty-five hundred feet and the peaks are covered with moss or in some cases no vegetation whatever. The highest peak is Mt. Woronkofski with an altitude of 3305 feet.

The two shores of Chichagof Pass bear for the most part common characteristics,-- steep-to at the water's edge, with the tree line coming to the upper face of the low cliffs and oftentimes overhanging. Circle Bay and the indentation Southwest of it have narrow rocky beaches along their inside margins. The Northern side of Woronkofski Island also

possesses a narrow rocky low-water area but the remainder is similar to the major part of Chichagof Pass.

The Zarembo Island portion has to a large degree the same free steep shore line, but also has a few rocks close off shore, and one extensive sand beach and shoal water area just opposite Chichagof Pass. Except immediately back of the bight containing this beach, the inshore slopes are as usual steep and thickly wooded.

FLORA and FAUNA.

The dense timber growth consists principally of spruce and hemlock, with a small amount of cedar. Crab-apple and ash trees are encountered occasionally. Narrow grassy areas are nearly always found at stream mouths and just inshore of the high water line along the coves and beaches. The dense tangle of rotten logs, moss, roots, and Devil's Club make interior travel difficult.

Zarembo Island is a game preserve and deer and black bear are plentiful. Mink also abound and signs of porcupine were much in evidence. Woronkofski and Etolin Islands no doubt are similarly inhabited but the camp on Zarembo gave opportunity for first hand observation there. Snipe and many varieties of ducks were abundant and migrating geese were frequently seen. Bald-headed eagles, ravens, crows, and blue jays were in sight almost every day. Humming birds canaries, and hawks were scarcer. The ever present sea-gull was of course a part of all landscapes. In the summer salmon run in great numbers up all the streams of sufficiently large size and low gradient. The same streams contain several

kinds of trout.

SETTLEMENTS and RESOURCES - COMMERCE.

The shore line of this sheet has no settlements, either Indian or white, and no mines are in operation within its area. Hand-loggers have at one time or another gone over all the shores but have hardly touched the great supply of timber, which no doubt will some day be a valuable source of paper.

Stikine Strait is the pathway of all large vessels stopping at Wrangell. Zimovia Strait and Chichagof Pass are much used by fish boats.

DETAILED DESCRIPTION.

Beginning at the North end of the sheet,--

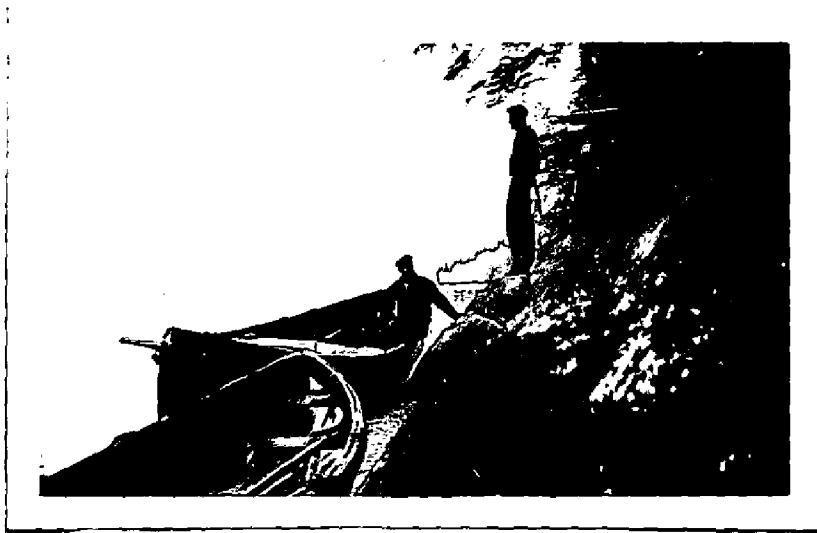
Woronkofski Point is not very definite in character and in fact is simply the low rounded North end of the island. It has a rocky low water area some thirty meters wide.

This rocky beach feature extends some two and one-half miles to the East Southeast and is characterized along the middle of the stretch by the numerous large boulders imbedded in a layer of mud over the bed-rock.

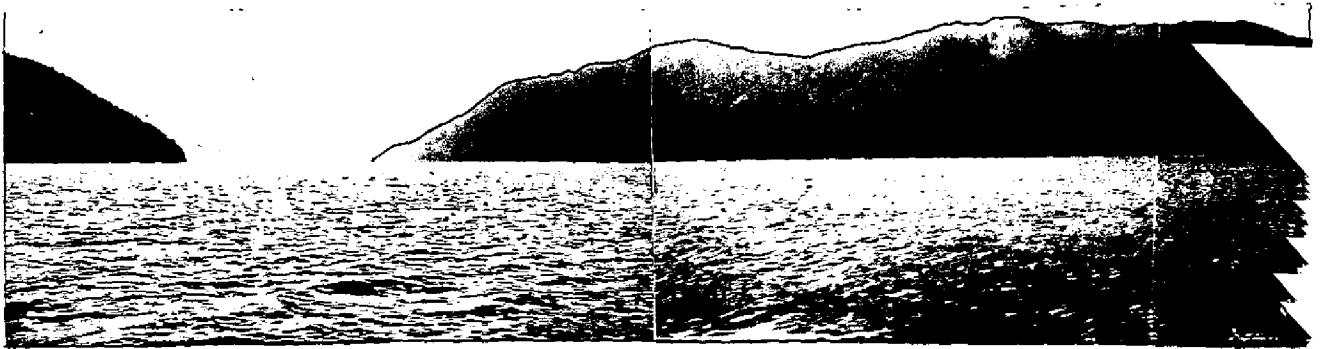
At a point along this shore about two miles from Woronkofski Point is a row of piles extending seven hundred meters off shore and constituting a menace to boats, in thick weather.

As the shore line rounds to the Southward at the Northeast point of the island, the low-water area disappears and the shore attains the steep-to condition that continues around into Chichagof Pass. The cliffs are for the most part of dark gray grading into light yellow in color, and although

steep, are not very high. The tree line ordinarily overhangs high-water only ten to twenty feet above it.



Typical shore line along East side of Woronkofski Island. The shores of Chichagof Pass are of similar nature. View also shows motor-whaleboat and dinghy used in the work.



Chichagof Pass and Woronkofski Island from a point opposite the Eastern entrance to the pass. Hat Island in the right foreground.

Circle Bay is a large half-moon indentation in the Southeastern corner of the island. It should give good protection from Northerly winds but was not tried out as an anchorage by the survey party. Opposite the middle of its entrance is Hat Island, small, round, thickly wooded, and

with a rock about seventy meters off high water line on the South.

A very prominent scar, caused by snow slides, leads from the center of the indentation West of Circle Bay for a long distance up the mountain side. It carries two rather small streams.

At an elevation of about three hundred and fifty feet up the hill-side Northwest of station Pit is station Scar, a large out-cropping of white quartz that shows plainly as a white triangle to ships coming up Stikine Strait.

At the North side of the Western entrance to the Pass is Drag Island, which has no special features.

To the Northwest of Drag Island is Reef Point, an extension of which reaches almost two hundred meters off shore. During the summer it is well marked by a plentiful supply of kelp.

Just back of station High is a small cove that made a very good camp site for the plane table party for a few days. It offers good protection to very small boats from Northerly winds .

High Point is not important and requires no particular comment. Wedge Point shows rather prominently to ships passing up and down Stikine Strait. It is a low thickly wooded tongue of land some thirty meters wide.

Elephant's Nose, as it is locally known, is a very remarkable formation on the Northwest corner of Woronkofski Island. From the North and South the steeply wooded hillside with the adjoining flatter region extending towards Wedge Point,- gives at a distance the appearance of an elephant's

head and trunk in a horizontal position.

South Craig Point is the Northern limit of the topography on Zarembo Island. The work of Wire Drag Party No. 4 of this season joins at this point, which has no peculiar topographical features.

Fritter Cove was not used as an anchorage by any of the party but has the appearance of offering good protection for small boats. The North side of the cove should be given a good berth in entering on account of the rocks extending a short distance off shore there.

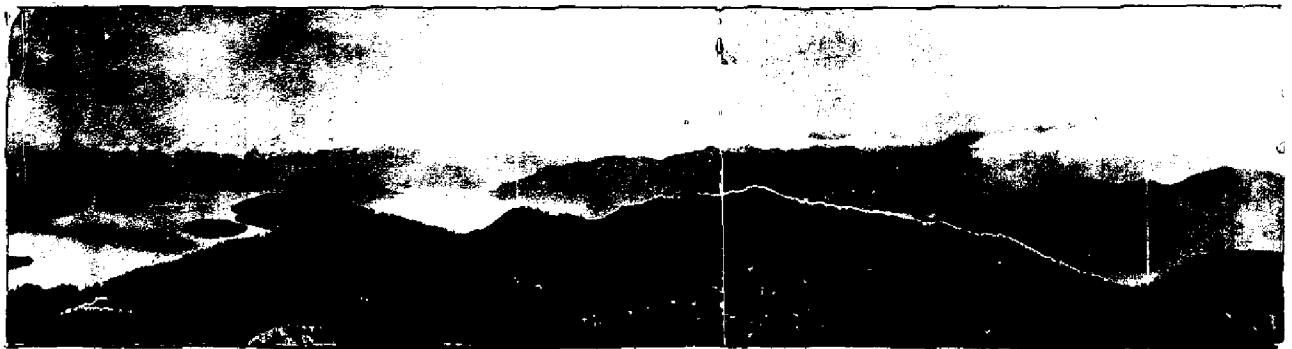
Opposite the Western entrance to Chichagof Pass is Meter Bight, containing a sand beach of an extent very rare in this vicinity and very fortunate in its location. It made possible the measurement of a primary triangulation base about two miles long. The flats bared to a distance of about five hundred meters off shore and for a length of over a mile. The water deepened very suddenly a short distance outside the low water area. The topography of this strip was done for the most part at high tide, but the low water area was dotted in as many times noted during the base measurement. Three streams enter the strait through these flats, the two Northern ones having a plentiful supply of salmon and trout.

As station Cliff is approached the low water area narrows and the shore from Cliff to Round Point is generally steep-to. Sheet No. of Zarembo Island, also part of this season's work, joins at Round Point.

In summer all these shores carry a line of kelp following the four or five fathom curve pretty closely.



Shore line between base stations Hot and South Base, East shore Zarembo Island. Base stake in the fore ground.



Looking North over Woronkofski Island from summit of Mt. Woronkofski.

SURVEY METHODS.

The regulation U.S. Coast and Geodetic Survey plane table outfit was used in this work. The rods were of the folding type reading to two hundred and twenty meters. Only in very rare cases were rod readings of over six hundred meters taken. In a few places along Chichagof Pass sextant fixes with careful checks on the angles were taken to locate short stretches, (in no cases over four hundred meters long) that on account of the steep nature of the shore could not be traversed.

The control of the sheet was furnished by triangulation based on the Southeastern Alaska datum, ^{work of 1915 and 1916.} The triangulation in Zimovia Strait had not been completed at the time the Northeastern shore of Woronkofski was surveyed. Several signals were in place however and the traverse from station Large to station Go had intermediate checks by cuts previously taken with the alidade on stations Ledge, Ledge "a" and New from station North Base (1886). This six mile traverse required an adjustment of about twenty-five meters.

Plane table triangulation was taken through Chichagof Pass from stations Ab and Chic to Go and Pass 2, a distance of about five miles. When the position of Pass 2 was later computed and plotted, it differed about twenty meters from the plane table position. A local adjustment was made to absorb this discrepancy.

After the Chichagof Pass stations were located the intermediate stretches were surveyed by three point fix locations and short traverses.

In Stikine Strait also three point fixes were available at most points and these were combined with short traverses to run in the shore line between triangulation stations.

The work on this sheet was not pursued continuously, being interrupted by the base measurement and the requirements of wire drag work in Kashevarof Passage and Ernest Sound, at various times. Most of the contouring was therefore left until the shore line could be completed and several days given to contouring exclusively. When time for this was obtainable, in October, a succession of rainy and

foggy days kept the islands, especially the higher elevations, hidden almost continuously for the rest of the season. Sufficient data was secured to contour Woronkofski Island only.

The location and elevation of the main peaks was carefully determined. One hundred foot contours were then sketched in between the summits and sea level. Elevations in all cases were taken to ground level, or apparent ground level in the case of wooded peaks, and they are given with mean sea level as reference datum.

Mt. Woronkofski was climbed on a Sunday during the summer by Deck Officer V.A. Endersby. Photos obtained by him were used in sketching in contours and securing the approximate location of Sunrise Lake. One of the photos accompanies this report.

The topographic party consisted of the observer, and two rodmen, one of whom also acted as engineer. An open motor whaleboat with a small dinghy in tow was used in the work and proved exceedingly satisfactory. Where low water area made landings with the whaleboat inadvisable it was anchored and the work carried on with the dinghy and out-board motor. The combination was thus a very flexible one and also reliable. When necessary, work could be carried on at considerable distances from ship or camp without great loss of time.

STATISTICS.

Statute miles of shoreline	44.0
Square miles of topography ...	23.0
Recoverable plane table positions	15.

NEW PLACE NAMES.

1. Well Established Local Names:

Elephant's Nose.*

2. Assigned by Field Officers:

Circle Bay. *

Mt. Woronkofski.*

Sunrise Peak. *

Sunrise Lake. *

Sunset Peak. *

East Peak. *

West Peak. *

Fritter Bay. Cove *

Meter Bight. *

Drag Island. *

Hat Island. *

** Approved by GB.*

Respectfully submitted,

Rever C. Briggs,

Aid, U.S.Coast and Geodetic Survey.

Approved.

John A. Daniels

Chief of Party.

RECOVERABLE PLANE TABLE POSITIONS AND STATIONS.

STATION	ELEV.	LATITUDE	D.M.	LONGITUDE	D.P.	REMARKS.
	Approx. Above H.W.					
Arpee	3	56-16	1111	132-39	421	Drill hole & W.W.
Ab	2	56-20	1806	132-32	935	Marked with disc
Be	4	56-20	494	132-31	363	Disc.
Scar	350	56-21	570	132-31	371	White Quartz Outcrop
Pit	3	56-21	293	132-31	180	Disc
Kin	2	56-21	501	132-29	610	Disc.
Du	5	56-20	548	132-29	446	Disc.
Fie	5	56-20	1796	132-27	58	Disc.
Et	3	56-22	746	132-26	973	Disc.
Fo	8	56-21	130	132-26	90	Triang. Disc.
Hat	3	56-22	757	132-25	655	Disc
Go	4	56-22	1631	132-24	316	Disc.
Ledge	3	56-25	408	132-26	172	Triang. disc.
Out	12	56-25	879	132-25	655	Pile.
Lark	Top 8	56-25	774	132-27	5	Very large boulder- Not marked.