

4536

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patten, Director

State: Alaska

DESCRIPTIVE REPORT

Topographic
Hydrographic

Sheet No.

4536

LOCALITY

Sumner Strait and Duncan Canal

Mitchell Pt to Beecher Pass

1929

CHIEF OF PARTY

E. W. Eickelberg

Chart 8160 Extension fully app'd 2-3-70 H. Rodde

C. & G. SURVEY

L & A

JUN 23 1930

Doc No.

DESCRIPTIVE REPORT

TO ACCOMPANY

TOPOGRAPHIC SHEET "H" 4536

DUNCAN CANAL - S. E. ALASKA

U. S. C. & G. S. S. EXPLORER

E. W. EICKELBERG, COMDG.

1929.

DESCRIPTIVE REPORT

TO ACCOMPANY SHEET "H"

DUNCAN CANAL - S. E. ALASKA

AUTHORITY: Work was done under Director's instructions, dated February 19th, 1929 - Project No. 28.

LIMITS: The south-west end of sheet begins at Point Mitchell, Sumner Straits ($133^{\circ} 12.6' - 56^{\circ} 26.7'$) and extends north-east up Duncan Canal to ($133^{\circ} 06.1' - 56^{\circ} 37.1'$) on the west shore and ($133^{\circ} 04.4' - 56^{\circ} 34.8'$) on the east shore, which point joins Topographic Sheet "C", 1929. At the south-east corner, the sheet joins Revision Topographic sheet "D", 1929 at ($133^{\circ} 00.6' - 56^{\circ} 30.8'$) on the south end of Woewodski Island. The various islands lying north and west of Level Islands and White Rock are included in the sheet.

GENERAL DESCRIPTION: All the shore on this sheet is rocky, with either rock ledges or boulders between high and low water. The peaks, which rise to heights of six to nine hundred feet on the east side of Duncan Canal (Woewodski Island) are of gentle slope and are heavily wooded throughout. Just north of Mitchell Point (Kupreanof Island) the land is flat, heavily wooded, gradually sloping up to ten to sixteen hundred feet as one goes north up the Canal. White Rock is picked up first from the south and east. Level Islands show prominently from all directions. Lung Island, directly at south entrance to Canal, looms up clearly.

LANDMARKS: Besides White Rock and Level Islands the only noticeable landmark is the tailings of a mine located on the east shore in Latitude $56^{\circ} 31.9'$ and Longitude $131^{\circ} 02.8'$. This is of light brown color about 80 feet above high water in a clearing in the woods.

CONTROL: The main control was a scheme of third order triangulation extending from Level Islands up Duncan Canal to Latitude $56^{\circ} 38'$. Control up Little Duncan was plane table graphic triangulation. Traverses were run between triangulation stations. Due to close triangulation control, much of the shore line was run in from set ups at triangulation stations.

CLOSING ERRORS: About the islands and between triangulation stations, traverses were run according to Topographic Manual. Closing errors of traverses run are as follows:

(The following stations are all triangulation stations)

LAST	to	MITCHELL 2	Distance	4735 meters	-	Error	22 m.
KAH	to	NEXT				"	0 m.
BIG	to	LOUISE				"	0 m.
BIG	to	LEVEL	Distance	2600 meters	-	"	11 m.
LEVEL	to	LOUISE	"	4650 "	-	"	29 m.
"	"	Rerun	"	4650 "	-	"	18 m.

NEW	to	LUNG		Error	0 m.
LUNG	to	NEW		"	0 m.
HOPE	to	SOUTH		"	0 m.
SAW	to	BAY	Distance	3240 meters	- " 13 m.
BAY	to	SAW	"	3930 "	- " 16 m.

All traverses were run and checked within the limits prescribed in the Topographic Manual, and were adjusted by standard methods as described in the Manual.

LOCATION OF OFF LYING FEATURES:

Reefs and rocks were located by rod readings.
Signals REF and OUT were located by directional cuts.
Pile (submerged) at Kah Sheets Bay, was located by cuts.
Rock south of White Rock was located by cuts.
Two rocks south of station OUT were located by directional cuts.

NEW NAMES:

Two islands, shown on previous charts, but not named, were given the names Baby Island and Butterworth Island, both names being in local use.

PLANE TABLE POSITION:

A list of plane table positions of signals and objects on sheet is made a part of this report.

MARSHES:

The only marsh encountered is at the north-west corner of Kah Sheets Bay. There is about two feet of water on the grass at high tide. At low tide the marsh is dry and the mud flats extend about .9 mile to the south-east.

MAGNETIC OBSERVATIONS:

Magnetic Observations were made at triangulation stations LIMIT, CAMP - CENTER and LOUISE. Comparison with declinometer No. 12 was made at stations CAMP and LOUISE, and corrections indicated on sheet.

Respectfully submitted,

Philip C. Doran

Philip C. Doran,
Jr. H. & G. Engr.

CONNECTIONS TO OLD WORK:

Connection was made to old topographic sheet at station JAN, both by Sheet "H", and also revision Sheet "D-1929". All sheets joined correctly. Form lines joined and checked old sheets in proper manner. Junction with topographic sheet "C", 1929, was made at station POINT.

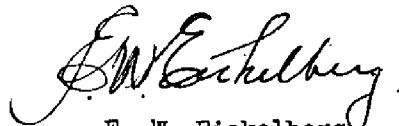
ANCHORAGE:

Small fishing boats anchored in Kah Sheets Bay just off triangulation station BAY.

APPROVAL SHEET TO ACCOMPANY TOPOGRAPHIC SHEET "H"

This sheet has been examined and is approved.

The names of Butterworth Island and Baby Island were obtained from Mr. E. E. Harvey who has been a resident in Duncan Canal for the past twenty-five years.



E. W. Eickelberg,
Commanding Officer,
U.S.C. & G.S.S. EXPLORER.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4536

TOPOGRAPHIC TITLE SHEET

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

Field No. "H"

REGISTER NO. 4536

State ALASKA

General locality SUMNER STRAIT AND DUNCAN CANAL

Locality MITCHELL POINT — DUNCAN CANAL TO BEECHER PASS

Scale 1:20,000 Date of survey July-Aug.-September 1929

Vessel EXPLORER

Chief of Party E. W. EICKELBERG

Surveyed by P. C. DORAN

Inked by P. C. DORAN

Heights in feet above M.H.W. to ground ~~to top of grass~~

~~contour, Approximate contour~~, Form line interval 50 feet

Instructions dated February 19, 1929

Remarks: