4343

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

....., *Director*

C. & G. SURVEY
L. & A.
MAY 9 - 1928
Acc. No.

State: S.E. Alaska

DESCRIPTIVE REPORT

Topographic / ~~*Hydrographic*~~ *Sheet No.* 4349

LOCALITY

San Alberto Bay

N. End of San Alberto Bay

1927

CHIEF OF PARTY

H. A. Cotton

GOVERNMENT PRINTING OFFICE

4349

DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET NO._____

(Field Letter "E")

SAN ALBERTO BAY

(North End)

SOUTH EASTERN ALASKA

June, 1927.

Scale 1:10,000

AUTHORITY:

The topography was executed in accordance with instructions of Feb. 18, 1927 to the Commanding Officer of the Steamer EXPLORER.

LIMITS:

This sheet connects with the previous surveys on the south and west and with topographic sheet "F" at stations △ LATE and ⊙ END on the east side. The survey covers the north end of San Alberto Bay from Point Ildefonso on the west to Longitude 133° 09' on the east. The limits of the sheet are: Latitude 55° 31' to 55° 38'.

Longitude 133° 09' to 133° 15'

CONTROL:

Control for the survey was furnished by a system of triangulation based on recovered stations △ PARIDA and △ ALBERTO, and established by the party during the season. Station △ WITNESS was also recovered.

ELEVATIONS:

Elevations are in feet above high water and were taken to the tops of the trees. The crests of the range of hills across the north end of the sheet are wooded. Because of the distance of these hills from the beach it was difficult to obtain elevations except on those points or crests which showed on the sky line.

METHODS:

The planetable and stadia method was used for this survey. The sextant was used to locate part of the low water line which was not located by planetable because of the stage of the tide when working in that vicinity.

Control was obtained generally by three point fix positions and by planetable triangulation. The following is a list of traverses run with

the resulting closures and adjustments:

1. From Δ WEST around the north side of Pt. Ildefonso Island to ⊙ BURN; and from a 3 point fix position on the small island about one half a mile south of Δ WEST, around the south shore of Pt. Ildefonso Island to ⊙ BURN, bringing the two ends of the traverse together at that point. Δ BURN was not recovered but its approximate position was found and the signal ⊙ ~~BUM~~ Burn, built at that position. This traverse closed to twelve meters, which was adjusted.

LOCATION	DIST. (stat. mi.)	Closure	
1. Station WEST to Station ~~BUM~~ BURN	1.8	12 meters	adjusted
2. Station LATE to Station BUG	0.6	0 "	
3. Station BUG to Station SIDE	0.8	0 "	
4.			
Total length of traverses	3.2	12 meters	

CONNECTION WITH PREVIOUS SURVEYS:

The shore line in this section which had been previously surveyed was traced and drafted onto this sheet before any work was done. Good connections were not obtained in every case and part of the previously surveyed shore line was re-run. That portion of the previous survey which was not re-run is shown on this sheet in pencil.

On the west side of this sheet considerable difference was found on connecting with the previous survey. For this reason the shore line was re-run as far west as Point Ildefonso. An extension was made to the sheet so as to include the whole of Point Ildefonso Island.

The islands at station Δ TOM were entirely re-run.

The Witness Islands and Witness Rocks were not re-run as no difference was apparent by cuts taken to tangents and by signals located on them.

On the south east side of the sheet considerable difference was also found in connecting with the previous survey.

The large Fox Farm Island was re-run; also the island just to the south, and the small island at Δ WEE.

The work connected well at Δ SIDE, but there was considerable difference in the shore line for several hundred meters north of that point.

In the Alberto group of Islands two of the islands and part of another were re-run. The shore line around the remainder of this group showed no appreciable differences.

In completing the survey of the sloughs from Δ ~~DURA~~ DUHA to Δ SIDE reasonably close connections were obtained with the shoreline of the previous survey, and so resurvey of the adjacent shore line was not made.

Elevations were figured and form lines re-sketched on Pt. Ildefonso Island; the island just west of station Δ TOM; the Fox Farm Island; and along the south east side of the sheet. In making a resurvey of the islands in the Alberto group form lines were not re-run as no differences were apparent.

CHARACTER OF THE SHORE LINE:

The shore line is low and rocky with many off-lying rocks and reefs. Trees make down nearly to high water and the rise of the ground from the beach is gradual.

The low water areas are composed largely of loose rock and gravel, and rock ledge. There are small areas of coarse sand as indicated on the sheet. In inking the low water areas a plain black dotted line was used to indicate rock ledge where the symbol for rock ledge would have tended

to obscure important high water rocks or to detract from the distinctiveness of the high water line.

DESCRIPTION OF THE COUNTRY:

The country back from the beach is rugged and heavily wooded. Along the north shore the country is comparatively level back to the first range of hills shown on the sheet. Mountain ranges continue from that section northward.

ANCHORAGES:

Good anchorages for small boats will be found in the small "bite" at signal ⊙ GAB on the east side of the Fox Farm Island; in the small bay north west of station △ BARE; and in a "bite" just east of signal △ LATE.

RECOVERABLE PLANETABLE POSITIONS

Object and description	Latitude & Longitude	Seconds in Meters	Height in Feet	Remarks
DOME--highest point on the rock.	55° 34' 133° 12'	818.0 634.0	6	The rock is bare and the station is on a high point at the west side.
GAB--north gable of the house.	55° 33' 133° 10'	577.0 311.0	16	The dwelling house and largest building in the group.
JO--top of a large boulder.	55° 32' 133° 10'	435.0 661.0	4	Station is at top of largest boulder on the east end of the island.
ITE--top of large boulder.	55° 32' 133° 09'	68.0 526.0	4	Station is the top of the large boulder on the high water rocks.

STATISTICS

Statute miles shore line--high water		23.0
--low water		14.0
Area square statute miles		8.3
Number of elevations		20
Number of recoverable stations:	Triangulation	15
	Planetable	4
Positions occupied		37

Examined, approved and forwarded.

Harold A. Cotton,
Commanding Officer,
U.S.S. EXPLORER.

Respectfully submitted.

B. G. Jones
Jr. H. & G. E.,
C. & G. Survey.

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO No. 11-DRM

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON July 27, 1928.

SECTION OF FIELD RECORDS

Report on Topographic Sheet No. 4349

North End, San Alberto Bay, Alaska

Surveyed in 1927

Instructions dated February 18, 1927.

Chief of Party, H. A. Cotton.

Surveyed and inked by B. G. Jones.

1. The records as well as the plan and character of the survey conform to the requirements of the General Instructions.

2. The character and extent of the survey satisfy the specific instructions.

3. There is considerable difference in the representation of islets and rocks in the waterway north of Pt. Ildefonso on this sheet and T. 3402. This sheet should be given the preference in this locality, except that the islet 160 meters north by west of △ Burnt Pt. on T. 3402 should be charted, as it is evidently a rod reading or plane table set-up.

   Also several rocks awash east of Pt. Ildefonso are probably correct and should have been shown on T. 4349.

4. The junctions with the adjoining surveys are adequate and no additional surveying is required.

5. The character and scope of the surveying and field drafting are excellent.

6. Reviewed by E. P. Ellis, July, 1928.

Approved:

L. O. Colbert

Chief, Section of Field Records (Charts)

F. S. Borden

Chief, Section of Field Work (H. & T.)

Form 537a
11—5813

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4349

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. "E"

REGISTER NO. 4349

State S.E. Alaska

General locality ~~South East Alaska~~ San Alberto Bay

Locality ~~San Alberto Bay (North End)~~ North End of San Alberto Bay

Scale 1:10,000 Date of survey June, 1927.

Vessel Steamer EXPLORER

Chief of Party Harold A. Cotton

Surveyed by B. G. Jones

Inked by B. G. Jones

Heights in feet above h. w. ~~ground~~ to tops of trees

~~Contours Approximate contours~~ Form line interval 100 feet

Instructions dated February 18, 1927.

Remarks:

GPO