

4773

Diag. Cht. No. 8152-2

Form 504
 DEPARTMENT OF COMMERCE
 U. S. COAST AND GEODETIC SURVEY
 _____, Director

State: SE:Alaska

G. & G. SURVEY
 L. & A.
 MAY 11 1928
 Acc. No.

DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. ⁵ 4773
 Hydrographic }

LOCALITY

W. Coast of Prince of Wales I.

Ursula Channel

1927

CHIEF OF PARTY

H.A. Cotton

GOVERNMENT PRINTING OFFICE

S-65 20

3227
4773

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET NO. 5 4773

URSUA CHANNEL

SHORES OF SAN JUAN BAUTISTA

&

SAN FERNANDO ISLANDS

U.S.S. EXPLORER

Season of 1927

Scale 1:10,000

AUTHORITY:

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

EXTENT:

The work of this sheet includes the launch hydrography in Ursua Channel, S. E. Alaska along the shores of San Juan Bautista and San Fernando Islands remaining incomplete from a previous season's work in this channel. On San Juan Bautista Id. it comprises the inshore sounding from the beach to a distance of about $\frac{1}{2}$ mile offshore from Pt. Agneda around the NW side of the island a distance of about 3 miles; on San Fernando Id. from the beach to a distance of about $\frac{1}{5}$ mile offshore from Point Amargura northward to about 2 miles north of Fern Point.

GENERAL REMARKS;

Due to the fact that the distance offshore to completed work was so small and the consequent great waste of time and number of signals necessary if lines were run normal to the depth curves, it was decided to accept the alternative offered by the instructions and run the lines parallel to the beach. Lines normal to the beach were used on San Fernando Island north of Fern Point.

CONTROL:

Control was furnished by the recovery of all old triangulation stations in this area. These in turn provided control for the topography which immediately preceded the hydrography. All topographic stations used in the sounding were located by traverse methods with closures adjusted.

METHODS:

Lines were run following the direction of the shoreline. This necessitated curved lines in many places between positions; care was taken to maintain the proper spacing in such cases by estimation. The prevalence of thick kelp for much of the distance close inshore prevented the launch from running as close to the beach as was desired. In any event such areas between the beach and the line of soundings closest inshore are of no practical importance as the presence of kelp indicates them to be foul and irregular.

In general courses were steered, positions taken whenever available, the hand lead used to a depth of about 15 fm. and the machine lead in greater depths.

In most of the area the water deepens rapidly and a somewhat wider spacing of lines was found to give plenty of data for locating the depth curves. This is especially true in the vicinity of Fern Point on San Fernando Id.

DANGERS:

No rocks or dangers previously unknown were found during the progress of the work. Both shorelines are broken and irregular. Some shoals off San Juan Bautista near Pt. Agueda previously indicated on the inshore ends of the old sounding lines were developed by additional soundings. Another rock patch one mile south of Fern Point was developed closely as it lies in an important area.

The prominent bay in San Fernando Id. two miles SW of Fern Point was sounded and found quite unsuitable as an anchorage as the water is deep with steep sides and no gradual approach to the sand flat at the head.


TIDES:

The tidal plane used was based on the Automatic Gauge in operation at Craig. No correction for height or time was applied.


SOUNDINGS IN FEET:

The soundings were plotted on the smooth sheet in feet due to the fact that on the inshore lines a closer approximation could be made in drawing in the low water line.

Examined, approved & forwarded,


Harold A. Cotton,
Commanding Officer,
U.S.C. & G. S.S. EXPLORER.

Respectfully submitted,


C. A. Egner,
H. & G. E.,
Str. EXPLORER.

STATISTICS

DATE	VOL.	DAY	BOAT	STAT. MI.	POS.	SOUNDINGS		AREA	MILES TO & FROM WK.
						HAND	MACH.		
6-21-27	1	a	T #1	20.2	152	243	286		4.0
6-22-27	1	b	T #1	14.5	131	195	237		4.0
6-23-27	2	c	T #1	19.5	160	518	154		.2
6-24-27	2	d	T #1	<u>7.6</u>	<u>77</u>	<u>258</u>	<u>28</u>		<u>3.1</u>
TOTALS				61.8	520	1214	705		11.3

Field Records Section

Report on H. 4773 - Surveyed in 1927

Protracted by A. J. Thomsen

Soundings plotted by A. N. Stewart

Verified and inted by J. Lactowski

1. The records conform to the requirements of S. I. with such exceptions: (a) The recording as to what time a fix was taken could be more clearly recorded. (b) The combination of such signals as "Kay" and "Jay", "De" and "See", and "Eye" and "Hye" were used to obtain fixes and thereby, at times errors in the recording was noted.
2. The plan and character of development fulfill the requirements of S. I.
3. Sounding line crossings are adequate.

4. Depth curves cannot be completely drawn.
5. Field plotting was completed to the extent prescribed in G. 9.
6. Nine sounding values did not agree with corresponding values in sounding record.
7. Six positions were incorrectly plotted
Position 85-b was plotted 30 m. out of true position
Position 113-b was plotted 30 m. out of true position
Position 128-b was changed, as shown on boat sheet to agree with time.

The remaining positions 118-b, 126-b, and 127-b were plotted by the field party by using Δ Nan as a signal while the verification in the office was carried on by using \odot Nan except were specifically made note of in the records to use Δ Nan. The boat sheet is plotted by using \odot Nan.

- Signal "Art" was inked on the smooth sheet as \odot #1 although used as \odot Art,

Respectfully submitted
J. Lasfauzi Aug 29-1928

Copy for Section of Field Records files.

May 23, 1928.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
volumes of sounding records for

HYDROGRAPHIC SHEET 4773

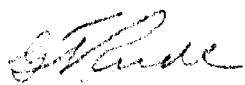
Locality: SAN ALBERTO BAY, S.E. ALASKA.

Chief of Party: H. A. Cotton, 1927.

Plane of reference is M L L W
ft. on tide staff at Craig

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.


Chief, Division of Tides and Currents.

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

AND REFER TO No. 11-DEM

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

October 29, 1928.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4773

Ursua Channel, Alaska

Surveyed in 1927

Instructions dated February 18, 1927 (EXPLORER)

Chief of Party, H. A. Cotton.

Surveyed by C. A. Egner.

Protracted by A. Thomsen.

Soundings plotted by A. N. Stewart.

Verified and inked by J. Laskowski.

1. The records do not conform to the General Instructions in that the word "same" is repeatedly used in the first fix on the page instead of giving the names of the signals.

No boats' courses are given.

The number of the position and the accompanying angle symbol are almost uniformly on separate lines in the record, which results in obscurity in many instances.

The use of similar names like "Em" and "En" for signals resulted in errors in recording.

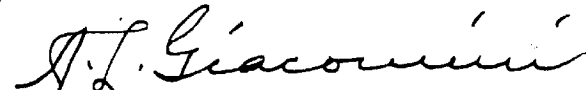
2. The character of development departs from standard practice in the following respects:

- a. In moderate depths the time interval of 30 seconds was adhered to throughout almost the entire work, even in depths of 1 and 2 fathoms. In rapidly changing depths like those in this survey, the prescribed intervals should have been followed.

- b. Most of the inshore sounding lines are curved, instead of being run straight between the fixed positions. As a result most of the inshore soundings are more or less inaccurately placed.

3. The plan and extent of development conform to the requirements of the specific instructions, except that the requirement of 50 meter spacing for the lines parallel to the shore was not always adhered to.
4. The sounding line crossings are adequate considering the uneven character of the bottom.
5. The information is sufficient for drawing the usual depth curves.
6. The usual field plotting was done by the field party. Only a few errors were found in it.
7. The junctions with the adjacent sheets are satisfactory, although some indications of shoals on the former surveys which lie slightly offshore, should have been developed. Following are shoal indications close to the limits of this survey which should be developed or dragged.
 - a. The 5 1/2 fathom sounding 250 meters E. by N. of signal Tre. (From H. 3547).
 - b. The 10 fathom shoal, with minimum depth of 6 5/6 fathoms north of Fern Pt. (From H. 3547.)
 - c. The 5 5/6 fathom sounding (H. 3547) southwest of the rocky shoal east of signal Que. The new development shows that the 5 5/6 sounding is separated from the rocky shoal by deeper water.
 - d. There are several undeveloped shoal soundings on H. 3547 about 1 mile southeast of Fern Pt.
 - e. The awash rock 300 meters north of triangulation point Fog.
8. Reviewed by E. P. Ellis, October, 1928.

Approved:


Chief, Section of Field Records (Charts)


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

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

C. & G. SURVEY
L. & A
MAR 27 1928
Acc. No.

REG. NO.
4773

HYDROGRAPHIC TITLE SHEET

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

Field No. 25

REGISTER NO. **4773**

State SE ALASKA

General locality ~~S. E. Alaska~~ W. Coast of Prince of Wales I.

Locality Ursua Channel

Scale 1:10,000 Date of survey June 21 - 24, 1927.

Vessel Steamer EXPLORER

Chief of Party Harold A. Cotton

Surveyed by C. A. Egner

Protracted by A. Thomsen

Soundings penciled by A. N. Stewart

Soundings in ~~fathoms~~ feet

Plane of reference MLLW

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated February 18, 1927.

Remarks: