

4764b

4764b

Form 504

DEPARTMENT OF COMMERCE SURVEY
U. S. COAST AND GEODETIC SURVEY L. & A.

DEC 19 1929

Acc. No.

State: ALASKA

11-5613

DESCRIPTIVE REPORT.

HYDROGRAPHIC Sheet No. 1 (4764)

4764b

LOCALITY:

S. E. ALASKA

KEKU STRAITS

SOUTH END

1929

CHIEF OF PARTY:
E. W. Eickelberg

E. W. EICKELBERG, *Comdg.*

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.
4764b

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. 1 (4764)

REGISTER NO. ^{4764b} 4764b

State S. E. Alaska

General locality Keku Strait

Locality South End

Scale 1:10,000 Date of survey April - October, 1929

Vessel EXPLORER

Chief of Party H. A. Cotton and E. W. Eickelberg

Surveyed by Thos. B. Reed and W. Weidlich

Protracted by Thos. B. Reed

Soundings penciled by Thos. B. Reed

Soundings in ~~fathoms~~ feet

Plane of reference M. L. L. W.

Subdivision of wire dragged areas by

Inked by *W H Bayford*

Verified by *W H B*

Instructions dated February 19, 1929

Remarks:

DESCRIPTIVE REPORT
TO ACCOMPANY SHEET NO. 1

AUTHORITY: Instructions dated February 19, 1929.

SURVEY METHODS: All soundings were taken with a hand lead using a 35 foot sounding launch. All signals used were recovered signals of the 1927 survey. No doubt existed as to the recovery of any signal used for this hydrography. This work consisted of development work called for in the instructions as given in Paragraph 8c to 8i and also work on the spot 0.7 miles North-West of station LO called for in Director's letter of May 16, 1929.

DISCREPANCIES:

- Area 8c: A least depth of 1 foot was found on two boulders in this area. Each boulder is about six feet in diameter and could be seen on the bottom at the time of sounding. (The previous least depth in this area was 5 feet.) (200 me + 130 me N. of Δ Rete) 4
- Area 8d: A least depth of 4 feet was found in this area on a rock quite small in extent. (The previous least depth in this area was 7 feet.) (470 me W. of \odot Ora) 4
- Area 8e: Several 10 foot soundings were found in this area. See Mr. Weidlich's note on page 16, vol. 2, regarding the 9 foot sounding on the 1927 survey. (Between \odot Kil + \odot Lay) retain 9ft sounding #4764 4
- Areas 8f to 8h: Additional development work was done in these areas. A 2 foot spot was found 60 meters West by South of Beacon 2A. This is a new beacon and was established after this sounding was done and was located by Mr. Weidlich on October 3, 1929. (See page 16, vol. 2.) (N.W. + S.W. of Δ Tern) 4
- Area 8i: A least depth of 5 feet was found on this rock. The bottom could be seen and the two 5 foot soundings were taken on the shoalest parts of the rock. About ten minutes was spent maneuvering over this rock to find the shoalest depth. (The previous least depth on this rock was 11 feet.) (Lat 56'-35.2', Long 133°-42.0') 4
- Area 8j: Additional sounding lines were run in this area. This entire section is very foul. A rocky ledge, awash at half tide, which does not show on the photostat was sketched from the sounding launch 1000 meters North-East of station ISA. A rock awash at M. L. L. W. was also found 200 meters North-West of signal NEP. 4
- Area 8k: A split line was run as called for in this area and then some additional development was done after finding a 32 foot spot. A depth of 5 feet was found on the shoal 520 meters West by South of station NAR. This is one foot less than shown on the 1927 survey. This sounding was on top of a rock about 10 feet in diameter which could be seen on the bottom. 4

Area 81: Additional soundings were taken as called for in the area immediately off signal COW. These soundings verify the office plotting of the 10 foot sounding on time and course.

4

TIDAL NOTE

Soundings from "a" day to "f" day were reduced from the gauge at Monte Carlo Island, correcting soundings in the vicinity of Devil's Elbow in accordance with Director's letter of September 7, 1929.

M. L. L. W. = 4.0 feet on Monte Carlo Island Staff.
Highest Tide observed = 13.5 feet.
Lowest Tide observed = minus 1.1 feet.

"g" day was reduced from the gauge at Entrance Island correcting it to Monte Carlo Island as follows:

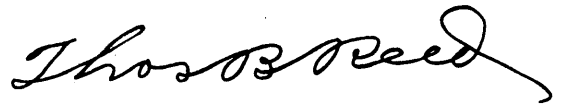
Minus 1.0 feet to H. W.
Minus 5 minutes to L. W.
Minus 25 minutes to H. W.

LIST OF STATISTICS

SHEET # 1 (4764)-b

<u>DAY</u>	<u>STAT. MI. OF SOUNDING LINES</u>	<u>NO. OF SOUNDINGS</u>	<u>NO. OF POSITIONS</u>	<u>VOL.</u>
a	7.2	422	136	1
b	9.8	368	86	1
c	5.3	234	47	1
d	0.7	17	5	1
e	0.9	32	17	1
f	1.7	73	22	1
g	2.4	205	37	2
h	0.5	17	17	2
		<u>1368</u>	<u>367</u>	

Respectfully submitted,

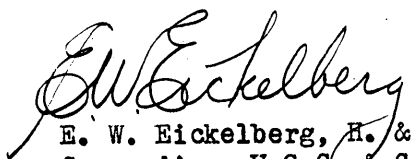


Thos. B. Reed.

APPROVAL SHEET

The smooth sheet and records herewith have been examined. No supervision of the field work was given by me as this work was completed before transfer of command on July 3, 1929.

Beacon 2A was located under my direction after the other work had been completed. A search was also made for the 9 foot spot (8c) after the first party failed to locate same. Ten and one-half feet was the least found but it is my opinion that the 9 foot spot should not be expunged from the former survey on account of the irregular nature of the bottom and the presence of boulders.



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

FOR FIELD RECORDS SECTION FILES

Division of Hydrography and Topography:

January 17, 1930

Division of Charts:

Tide Reducers are approved in
volumes of sounding records for

2

HYDROGRAPHIC SHEET

4764 B

Locality:

Chief of Party: South End of Keku Strait, Alaska

Plane of reference is H. A. Cotton and E. W. Rickelberg, in 1929
ft. on tide staff at mean lower low water, reading
4.0 ft. below B. M. Monte Carlo Island

~~XXXXXXXXXXXX~~
5.2 ft. on tide staff at Entrance Island

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 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.

Paul C. Whitney

Chief, Division of Tides and Currents.

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 4764-6

The following statistics will be submitted with the
cartographer's report on the sheet:

Number of positions on sheet 367 . . .
Number of positions checked 109 . . .
Number of positions revised 2 . . .
Number of soundings recorded 1369 . . .
Number of soundings revised 198 . . .
Number of signals erroneously
plotted or transferred 0

Date: March 7 - 1930
Cartographer: Waveren H Bamford

Section of Field Records
Report on Hyd. Sheet No. 4764 b
Keku Strait, S. E. Alaska

Surveyed in 1929
Hand lead soundings

Instructions dated Feb. 19, 1929 (Explorer)

Chief of Party - H. A. Cotton, E. H. Eickelburg

Surveyed by - J. B. Reed, H. Heidlick

Protracted and plotted by - J. B. Reed.

Verified and inked by - H. H. Bainford

1. The records conform to the requirements.
2. The plan and extent of development conform to the requirements of the specific instructions. The development of the area in the vicinity of Summit Island, called for

- in the instructions for this sheet, was registered as H. 4945 and will be reported on separately.
3. The sounding line crossings are generally adequate, considering the irregularity of the bottom.
 4. The curves were drawn from the combined hydrography on this sheet, H. 4764 b, and the 1927 work, H. 4764. In places where the soundings on the two sheets differ, the curves conform to the shoalest depths.
 5. There are no junctions except with the work of 1927, H. 4764. Items 8e to 8l, listed in the descriptive report of H. 4764 b under "Discrepancies" refer to the corresponding paragraphs in the review of H. 4764. In most cases shoaler depths were found by the additional work and no comment is necessary. All shoal soundings on H. 4764 however will be retained as this work is intended to supplement and not supersede H. 4764.
 6. The field plotting was completed to the extent prescribed. The protracting was excellent but a number of soundings were incorrectly spaced.

7. Character and scope of surveying - very good.
8. No additional work within these areas which have been reexamined is recommended.

Reviewed by R. L. Johnston

March, 17, 1930.

SECTION OF FIELD RECORDS

REPORT ON SHEET No. H-4764-b

MARCH-7-1930.

CHIEF OF PARTY - H.A. COTTON, E.W. EICKELBERG

PROTRACTED BY - THOS. B. REED.

YEC & INKED BY - WARREN H. BAMFORD

SURVEYED IN - APRIL - OCTOBER, 1929

SURVEYED BY - THOS. B. REED, W. WEIDLICH

SOUNDINGS PLOTTED BY - THOS. B. REED.

- 1./ The records were found to conform to the requirements of the General Instructions for Field Work.
- 2./ The protracting was excellent - only two positions being found that were erroneously plotted.
- 3./ The soundings on "C" day were poorly spaced. The soundings on "G" day were very poorly spaced, no effort being made to space them correctly.
- 4./ The sounding line crossings were found to be adequate, considering the "lumpy" bottom in this area.

- 5/ The development in channels and on shoals was sufficient.
- 6/ The depth curves on this sheet were modified to conform to the hydrography of H-4764
- 7/ The sheet was fairly clean and the work was legible.
- 8/ The field plotting was completed to the extent prescribed in the General Instructions.
- 9/ The office draftsman had to replot a great many of the soundings on "C" day due to the poor spacing done in the "field". About 85% of the soundings on "g" day had to be respaced and replotted for the same reason.
- 10/ The depth curves were modified on this sheet to agree with the hydrography on H 4764 as were the curves on H-4764 similarly adjusted.

Respectfully Submitted
Warren H Bamford.