

4835

Diag. Cht. No. 8550

4835

Form 504

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
E. Lester Jones, Director

State: Alaska

DESCRIPTIVE REPORT

Topographic }
Hydrographic } Sheet No. 13 ⁴⁸³⁵ **4835**

LOCALITY

Point Elrington

Elrington Id., Prince William Sound

Alaska

192 8

CHIEF OF PARTY

R. R. Lukens

Note by Chief of Party:

This sheet was executed to fill in a vacant space on sheet H-2833.

With reference to the 6 2/6 fathom sounding, a very careful search was made by feeling around and dragging the lead line in that immediate vicinity.

The smooth hydrography was plotted on the sheet on which the signals were located by the plane table.

The position of the Point Eyrington hydrophone which was used in nearly all the R.A.R. work is shown in blue.

This position was transferred to the R.A.R. sheet.

Positions depend on triangulation station NOB, located in 1927. The plane table was oriented on the small rock on which triangulation station PUG 1927 is located.


R.R. Lukens.

DESCRIPTIVE REPORT

to accompany

Hydrographic Sheet No. 13, Pt. Elrington, Elrington Id., Alaska.

Str. SURVEYOR

R.R. Lukens, Chief of Party.

Director's instructions dated Feb. 18, 1928

SURVEY METHODS:

The topography on this sheet was done to locate the signals. A plane-table traverse was run from triangulation station Nob to topographic station El checking the traverse by a re-section on triangulation station Danger Island. No adjustment of the traverse was necessary. A traverse was also run from Nob westward, checking on triangulation station Elrington Light and no adjustment of the traverse was necessary. The shoreline from topographic station Pin to topographic station Tan was rodded. The shoreline from Tan to topographic station El was sketched. All rocks were located by at least three plane-table cuts. The hydrography is plotted on the topographic sheet.

The hydrography was done with two of the SURVEYOR'S launches, No. 4 and the Motorsailer. Each of the launches was equipped with a power sounding machine. For depths greater than 15 fathoms vertical casts were taken with the sounding machine. For lesser depths the hand lead was used.

Attention is called to the sounding of six and two-sixths fathoms in Lat. $59^{\circ} 55'$ plus 60 meters Long. $148^{\circ} 12'$ plus 320 meters. See position 85 a, Vol. 1, page 20. About two hours was spent in feeling around with the lead to obtain the least depth on this shoal. The shoal is a sharp pinnacle with deep water around it. The bottom is coral. A sounding of nine and one-fourth fathoms is in Lat. $59^{\circ} 55'$ plus ~~655~~¹⁶⁰ meters Long. $148^{\circ} 12'$ plus ~~200~~ meters. See position 26 c, Vol. 1, page 47.

Soundings taken on a and b days were reduced to the staff at Day Harbor, Alaska. Soundings taken on c day were reduced to the staff at Seward Alaska since the gauge at Day Harbor was dismantled at the time of the c day work.

DISCREPANCIES:

Topographic signal El was located in 1927 on Hydrographic Sheet No. 4727 by weak sextant cuts. The remains of the old whitewash were found and the signal was located on Sheet No. 13 by a plane-table traverse. The two positions of the signal differ by about 60 meters. The position of El as found on Sheet No. 13 is probably the better location. In plotting the fixes, the position of El as found on Sheet No. 13 was used.

The rock which lies about 160 meters southeast true from topographic signal Old was transferred from the boat sheet. There are no notes in the record regarding the rock and probably it was sketched in while the hydrography was being done.

DANGERS:

No offshore dangers were found. The inshore dangers are shown on the sheet.

STATISTICS

to accompany

Hydrographic Sheet No. 13, Pt. Elrington, Elrington Id., Alaska.

Date	Day	Vol.	Positions	Soundings	Miles	Boat
July 1	a	1	87	188	13.2	Motorsailer
" 3	b	1	78	223	14.1	"
Oct. 7	c	1	61	141	7.7	Launch No. 4
Totals			<u>226</u>	<u>552</u>	<u>35.0</u>	

Respectfully submitted,

J. C. Partington
Jr. H. & G. E.

Approved and forwarded,

R. R. Lukens
Chief of Party

Mar. 12, 1929

Division of Hydrography and Tirography:

Division of Charts:

Tide Reducers are approved in
1 volume of sounding records for

HYDROGRAPHIC SHEET 4835

Locality: Pt. Elrington, S. W. Alaska

Chief of Party: R. R. Lukens in 1928

Plane of reference is Mean lower low water, reading

~~4.8 ft. on tide staff at Day Harbor, Alaska~~

~~2.6 " " " " Seward, Alaska~~

4.8 ft. on tide staff at Day Harbor, Alaska

2.6 " " " " Seward, Alaska

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.

U.S. Coast and Geodetic Survey
Field Section
March 23, 1929

Report on hydrographic sheet No. 4835, Alaska.

Chief of party - R.R. Lukens
Surveyed by - S.B. Grenell and J.C. Partington
Projected by J.C. Partington
Verified and inked by J.T. Stearns

The topography was electeded on this sheet directly; therefore it is taken for granted the signals are o.k. (plotted correctly). The field plotting of boat positions was made with good care; soundings pencilled in legible manner being plotted in accordance with true intervals except in a very few cases.

Revised: 19c (red); 1a (green)

Data for plotting is not sufficient: 52a (p. 14); 64a & 65a (p. 16);
58b, 45b, 32b, 8b.

On page 16, between 63a and 64a true intervals require interpretation
On page 36 two soundings are shown at one true.

Section of Field Records
Report on Hyd. Sheet No. 4835
Pt. Elrington, Elrington Id., Alaska
Surveyed in 1928.

Instructions dated Feb. 18, 1928 (Surveyor)

Chief of Party - R. R. Lukens

Surveyed by - S. B. Grenell and J. C. Partington

Protracted and plotted by - J. C. Partington

Verified and inked by - J. T. Stessin

1. The records conform to the requirements.
The location of the hydrophone, which is plotted on this sheet, was given in the records of H. 4856, page 62 Vol 1, and has been copied into this record.
2. The plan and character of development conform to the requirements of the General Instructions.
3. The plan and extent of the survey satisfy the specific instructions.
4. The sounding line crossings are satisfactory.

5. The information was sufficient for drawing the usual depth curves.
6. The only contemporary sheet which joins this work is H. 4730. Sounding lines from this were enlarged to this scale and are shown in red. They agree well with the new work. There is a little gap of about 300 meters between the southern limit of this work and the next line on H. 4730.
7. The usual amount of field drafting was well done except that the $9\frac{2}{5}$ fathom sounding at pos. 26c, which is mentioned in the Descriptive Report, was incorrectly protracted.
8. The character and scope of the surveying is good. The position of topographic signal "El", differs by about 60 me. from the old position. This new location is thought to be more nearly correct and was used in the protracting. As it is used on only four positions, the hydrography is little affected. While part of the shoreline is only sketched it is probably more accurate than the old topography and should be used for charting.
9. No additional work is necessary.

Reviewed by P. L. Johnston

March 1929.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4835

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. 13

REGISTER NO. 4835

State Alaska

General locality Elrington Id. Prince William Sound

Locality Point Elrington

Scale 1:20,000 Date of survey July and October, 1928

Vessel Str. SURVEYOR

Chief of Party R.R. Lukens

Surveyed by S.B. Grenell and J.C. Partington

Protracted by J.C. Partington

Soundings penciled by J.C. Partington

Soundings in fathoms feet

Plane of reference Mean lower low water

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated Feb. 18, 1928, 192

Remarks:

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 4835

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

Number of positions on sheet 226 . . .

Number of positions checked 102 . . .

Number of positions revised 2 . . .

Number of soundings recorded 552 . . .

Number of soundings revised 5

Number of signals erroneously

plotted or transferred Topography executed on this sheet

Date: March 23, 1929

Cartographer: John M. Stearns