

4724

4724

Form 504

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

....., Director

U. S. COAST AND GEODETIC SURVEY
L. S. S. S.
Acc. No.

State: Alaska

DESCRIPTIVE REPORT

Topographic } Sheet No. ^B **4724**
Hydrographic }

LOCALITY

Entrance to Resurrection Bay

Harding Gateway near Cheval I.

1927

CHIEF OF PARTY

R.R. Lukens

GOVERNMENT PRINTING OFFICE

DESCRIPTIVE REPORT

To accompany Hydrographic

Sheet " B"

Str. SURVEYOR.

R.R. Lukens,
Comd'g.

1927.

This sheet which is on a scale of 1:40,000, covers the development of a small area 3 miles southward from Pilot Rock, near the western approach to Resurrection Bay, Alaska.

The old hydrography shows one 40-fathom sounding in this vicinity with deep water all around it.

METHODS All soundings are up and down casts made while the ship was stopped.

TIDE DATA Tabulations from the SEWARD gauge were not available at the time the soundings were reduced therefore the predicted tides were used. There were no depths under 49 fathoms.

CONTROL The sounding was done using a copy of chart # 8527 as a boat sheet. Where peaks were located by triangulation as many were, the computed positions were plotted on the smooth sheet. In a few cases where tangents were used they were transferred from photostat copies of the original topographic sheets.

RESULTS: The shoalest sounding made was 49 fathoms. The soundings indicated that no shoal water of any extent exists here. This area is on the track of considerable traffic so that any dangerous shoal would have been reported as a breaker.

Respectfully submitted


R. R. Lukens,
Commanding Str. SURVEYOR.

STATISTICS

For Hydrographic Sheet B

May 6th A day 49 positions 49 soundings SURVEYOR
19.5 statute miles. 8 sq. sta. miles

Hydrographic Sheet No. 4724 - Surveyed in 1927

Report on Verification & Inking

Chief of Party - R. R. Tuborn
Sounded by - R. R. Tuborn
Plotted by - E. H. Kirsch
Soundings plotted by E. H. Kirsch

Verified and inked by J. Fleming

1 - Records conform to General Instructions

2 - Sku and character of developments conform to General Instructions

4 - ~~But as sounding line crossing noted and this is made up of
the sounding mentioned in the description report~~

5 - Depth curves can be completely drawn

6 - Field Plotting completed in accordance with General Instructions

7 - Field Drafting ~~is~~ Satisfactory

9 - Soundings ~~and~~ area developed are not sufficient
to definitely establish the ~~non-existence of the~~
40 fathom sounding ^{from H. 2760} in this locality

John Fleming

Feb - 28 - 1928

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 August 27, 1928.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4724

1. The records conform to the "General Instructions."
2. The plan and character of development fulfill the requirements of the General Instructions.
3. The field plotting is accurate and quite complete, but four rock symbols shown on the boat sheet were omitted in the area represented by C day.

Only 2 positions were found to be inaccurate.
4. The field drafting and plotting are excellent.
5. Remarks: The sounding at the extreme left of this sheet represented by position 110 b may be further investigated by reference to H. 4730.
6. Report by J. Fleming, March 6, 1928.

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

August 27, 1928.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4724

Alaska - Entrance to Resurrection Bay - Harding Gateway near Cheval I.

Chief of Party, R. R. Lukens.

Surveyed by R. R. L.

Protracted and soundings plotted by E. H. Kirsch.

Verified and inked by J. Fleming.

1. No specific instructions to investigate the area in the vicinity could be found.
2. The development for the area covered is sufficient and additional work, unless desired to investigate the 40 fathom shoal shown on sheet 2760, is not necessary.
3. The depth curve for 100 fathoms could be drawn.
4. The survey was compared with sheets H. 2760, H. 3420 and H. 3421 and all soundings in the area covered were plotted on the sheet in pencil. The surveys checked up very well except that the present survey shows a 50 fathom sounding about 200 meters from the 40 fathom shown on H. 2760.
5. Drafting - good.
6. Reviewed by E. R. McCarthy, February 29, 1928.

Approved:

Chief, Section of Field Records (Charts)

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

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4724

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. B

REGISTER NO. **4724**

State ~~S. W.~~ Alaska

General locality Entrance to Resurrection Bay

Locality Harding Gateway near Cheval Island

Scale 1:40,000 Date of survey May 6th, 1927

Vessel Str. SURVEYOR

Chief of Party R. R. Lukens

Surveyed by R. R. Lukens

Protracted by E. H. Kirsch

Soundings penciled by E. H. Kirsch

Soundings in fathoms ~~feet~~

Plane of reference M. L. L. W.

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated February 3rd, 1927, 192

Remarks:

4724 Add'l. Wk.

4724 Add'l. Wk.

Form 504

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

....., Director

State: Alaska

DESCRIPTIVE REPORT

Topographic Hydrographic <i>Additional Work on Original Sheet</i>	Sheet No. 4724 Add'l. Work
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LOCALITY

Entrance to Resurrection Bay

Harding Gateway

1928

CHIEF OF PARTY

R.R. Lukens

Descriptive Report

Hyd. Sheet 4724

Str. Surveyor

R.R. Lukens

chief of Party

1928.

D E S C R I P T I V E R E P O R T .

To accompany

Hydrographic Sheet 4724.

Str. SURVEYOR

R.R. Lukens

1928.

The following additional work was done on this sheet during the season of 1928:

- (a) Additional development of the small bank about 2 miles south true from Lighthouse Rock
- (b) A small amount of hydrography just SW from Barwell Island.

A close development was made of the small bank, 2 miles southward from Lighthouse Rock. A system of lines were run in a north and south direction, and crossed by an east and west system. There is a sharp narrow ridge here, lying in a north and south direction. The least depth when crossing the ridge was obtained by the fathometer. This sounding is near position 47 A and reduces to 19 1/2 fathoms. The water quickly deepens on either side of the ridge. Most of the soundings in this vicinity showed mud bottom. It is believed however that the ridge on which the least depth was found is rock. It is so narrow that no up and soundings were obtained on it.

This bank is nearly in the track of vessels bound to the westward from Seward, and no breakers have been reported. During the winter months, a tremendous sea makes here, and if there were any dangers, no doubt breakers would have been seen and reported years ago.

On "A" day, all soundings made were vertical casts, for the reason that the fathometer was not functioning well. In most cases the fathometer soundings were recorded, but it is believed that they should not be given much weight.

No boat sheet was used. A tracing was laid down over the smooth sheet, and positions plotted on the tracing while the sounding was being done

Instr. dated Apr. 10, 1928.
arms.

A small area southward from Barwell Island was filled in on this sheet for the reason that no signals were available on the 1:20,000 hydrographic sheet covering the west side of Day Harbor.

The smooth plotting was done by P.L. Bernstein. The development is close and the lines are hard to follow, but it is believed that they can be followed by the use of a glass.

The only additional signal used this year was Δ Slope. The position was taken from the triangulation data of 1905.

Soundings reduced from Seward gauge.

Respectfully submitted,


R.R. Lukens, Chief of Party

Section of Field Records
Instructions dated April 10, 1928 (Surveyor)

Report on sheet #H-4724 Add'l Work.
Chief of Party - R. R. Lukens
Protracted by - P. L. Bernstein
Verified and inked by - F. G. Euskin

Surveyed in 1928
Surveyed by - R. R. Lukens
Soundings plotted by - P. L. Bernstein

1. The sounding records were complete and legible.
2. The protracting was excellent. A little over 60% of the positions were checked (due to the nature of the work) and none were found erroneously protracted.
3. The plotting of the soundings was very good. The first few soundings recorded to 1/2 fathoms were erroneously plotted as the next fathom. The other errors were due to careless spacing. About 5% had to be re-plotted.
4. Bottom characteristics were not plotted in the development around Barwell Island. A light buoy at position "10a" was not plotted.
5. Even tho the work was "very close", it was easily legible to be bare up. (A reading glass was suggested in the field report, but it was not necessary).
6. The drafting conformed to the General Instructions.
7. It would have been better if the "Add'l Work" positions had been put in in a different colored ink, as there were two red "A" days in the same area.

Respectfully submitted

Frank G. Euskin

There is little to add to the above report.
The instructions were complied with except that no vertical cast was obtained after the shoalest depth was found.

Feb. 20, 1929
Nos. 1, 1929

Reviewed by R. L. Johnston Mar 2, 1929.

(FOR FILES SECTION OF FIELD RECORDS)

E.A.L.

February 18, 1929.

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in
1 volume^s of sounding records for

HYDROGRAPHIC SHEET 4734 (add'l work)

Locality: Harding Gateway, S. W. Alaska.

Chief of Party: R. R. Lukens in 1928.

Plane of reference is Mean lower low water, reading
2.6 ft. on tide staff at Seward, Alaska.
~~ft. below B. M.~~

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.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

Additional Work on Original Sheet

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 4724 4724 Add'l. Work

State Alaska

General locality . . . Entrance to Resurrection Bay
Harding Gateway

Locality . . . Harding Gateway
Ent. to Resurrection Bay

Chief of party R.R. Lukens

Surveyed by R.R. Lukens

Date of survey Season 1928

Scale 1:40 000

Soundings in Fathoms

Plane of reference . . MLLW

Protracted by PLB . . Soundings in pencil by PLB

Inked by F.G. Erskine . . Verified by F.G.E.

Records accompanying sheet (check those forwarded):

Des. report, Tide books, Marigrams, Boat sheets,

Sounding books, Wire-drag books, Photographs.

Data from other sources affecting sheet

Remarks: Additional work done on this sheet this year in pencil.

4724 Add'l. Work

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 4724

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

Number of positions on sheet .107 . .
Number of positions checked 75 . .
Number of positions revised .12 . .
Number of soundings recorded . 254 . .
Number of soundings revised . 13 . .
Number of signals erroneously
plotted or transferred 0 . .

Date: - - Feb 10 1929 - - - - -
Cartographer: - Frank G. Perkins - - - - -