

5253

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Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. PATTON, Director

State: S.W. ALASKA

DESCRIPTIVE REPORT
5253
Topographic } Sheet No. 42
Hydrographic }

LOCALITY
KODIAK ISLAND
EAST COAST

1932

CHIEF OF PARTY
F. B. T. Siems, H. & G. E., C. & G. S.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REG. NO. 5253

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. 42

REGISTER NO. 5253

State ~~VI~~ Alaska

General locality ~~ADAK ISLAND~~ Kodiak Island

Locality ~~CAPE BIRNIE~~ Cape Chiniak to Sitkalidak Str.

Scale 1:40000 Date of survey July - September, 1932

Vessel U.S.C. & G.S.S. SURVEYOR

Chief of Party F.B.T. Siems

Surveyed by F.B.T. Siems

Protracted by Chester J. Beyma

Soundings penciled by Chester J. Beyma

Soundings in fathoms ~~feet~~

Plane of reference MLLW

Subdivision of wire dragged areas by _____

Inked by _____

Verified by _____

Instructions dated April 22, 1932, 19

Remarks: _____

DESCRIPTIVE REPORT
TO ACCOMPANY
HYDROGRAPHIC FIELD SHEET NO. 42, 1932.

Str. SURVEYOR

Scale 1:40000

F.B.T.SIEMS, Com'd'g.

INSTRUCTIONS:

This survey was executed under Instructions from the Director dated April 22, 1932.

SURVEY METHODS:

All the hydrography on this sheet was accomplished by the SURVEYOR using the fathometer as the principal sounding apparatus. Numerous vertical wire soundings were taken to obtain comparisons with the fathometer soundings. Visual fixes were used for position finding. Mountain peaks, located by triangulation and supplemented by topographic and hydrographic locations furnished control.

REDUCTION OF SOUNDINGS:

The fathometer corrections for temperature, salinity and initial are included in a separate report entitled, "Reduction of Fathometer Soundings, 1932".

No sheave corrections were found necessary. The results of the sheave tests are shown on Page 1, Volume 1 of the sounding records.

TIDAL NOTE:

The reducers for the soundings on this sheet were obtained from the standard tide gage at Kodiak and the portable tide gage at Port Hobron.

Kodiak tide reducers were used for the northern part of this sheet; Port Hobron for the southern part of this sheet.

The dividing line was taken on a line drawn from signal BIRD through a point two miles N.E. of signal Pinnacle Rock.

PLOTTING:

Steel protractors were used exclusively for smooth protracting. In plotting the outer positions of the sheet, steel straight edges along with extension arms had to be used. In such cases it was noted that the arms of the protractor had excessive play to assure one well defined position.

Where vertical casts were taken the ^{fathometer} shallower sounding was plotted on the position with the comparative sounding either below or above and the two soundings connected by a brace. The letters "V.C." and "Fa" were placed opposite their corresponding soundings. ^{inked} ^{not inked}

DISCREPANCIES:

A discrepancy exists in Lat. $57^{\circ} 18.2'$, Long. $152^{\circ} 19.1'$, between positions 147P and 148P. It is believed a stray sounding of 24 fathoms was read because further development work between positions 23Q to 31Q

failed to verify the 24 fathom sounding. The 24 fathom sounding is plotted on the sheet but should be rejected. *This 24 fathom sounding is not rejected.* ✓
a.l.s.

SHOALS:

There is a shoal area with a least depth of 10 fathoms at MLLW in Lat. $57^{\circ} 27.0'$, Long. $152^{\circ} 06.1'$.
10⁺

Respectfully submitted,

Chester J. Beyma.
Chester J. Beyma, Aid.
U.S. Coast & Geodetic Survey.

Approved and Forwarded,

A.M. Sobieralski
A.M. SOBIERALSKI, H.&G.E.
Chief of Party, C.&G.S.

Sections of Field Records

Report on H-5253

Chief of Party: F. B. J. Siems

Protracted by C. J. Beyma

Verified and inked by G. H. Street

Surveyed by F. B. J. S.

Soundings plotted by C. J. B.

Topography inked by G. H. S.

1. Turns in lines are not always recorded otherwise the records conform to the requirements of the general Instructions.
2. The usual depth curves can be drawn.
3. The field plotting was completed to the extent prescribed in the general Instructions.
4. The office draftsman did not have to do over any part of the drafting done by the field party.
5. The junction with adjacent sheets is satisfactory.
6. (a) The 24 fathom sounding recommended for rejection in the Descriptive Report is not rejected because two 27 fathom soundings are recorded between 30 and 31 A, in this vicinity.
(b) A 19 fathom sounding at 28 K, Long. $152^{\circ} 25'$, Lat. $57^{\circ} 21'$ is rejected. This sounding is questioned in the sounding volume. Also two lines, 37 to 38 H and 1 M tend to prove the 19 fathom sounding erroneous.
(c) A depth of $10 \frac{1}{2}$ fathoms is recorded between

48 and 49 DD, Long. 152° 06.1', Lat. 57° 27.0'

This is the least depth on the sheet and a further search for a more shallow sounding seems advisable.

7. The quality of the field drafting is good. ✓

Respectfully submitted,

J. H. Street

Sept. 16, 1933

~~Sept 12 1933~~

~~J. H. Street~~

~~Hydrographic Engineer~~

~~Keep in pocket but not to be used~~

~~7. The quality of the field drafting is good.~~

~~Respectfully submitted,
J. H. Streeter~~

~~Sept. 15, 1933~~

2011 10 18 22

about H. J.

William H. Streeter

Very respectfully,
J. H. Streeter

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at the same time

SECTION OF FIELD RECORDS

Review of Hydrographic Sheet No. 5253
Cape Chiniak to Sitkalidak Strait, Kodiak Island, Alaska.
Surveyed July - September 1932
Instructions dated April 22, 1932 (Surveyor)

Chief of Party - F. B. T. Siems.
Surveyed by - F. B. T. Siems.
Protracted and soundings plotted by - C. J. Beyma.
Verified and inked by - G. H. Streeter.

1. The records conform to the requirements of the Hydrographic Manual.
2. The plan and extent of development conform to the general regulations and satisfy the specific instructions.
3. Soundings are consistent and depths at line crossings are in good agreement. The sounding records do not show any special search for least water on the bank noted in the Descriptive Report (lat. $57^{\circ} 27'.0$ long. $152^{\circ} 06'.1$).
4. Depth curves can be drawn satisfactorily.
5. Junctions with contemporary survey sheets H. 5250, H. 5177, H. 5183 and H. 4855 are satisfactory. Sheet H. 5280 is only partially inked but junction seems satisfactory. Sheet H. 5254 is being verified.
6. Comparison.- This is the basic survey of the area represented by the sheet (H. 5253). There are a few soundings on chart 8502 but they are of no value for comparison purposes.
7. Field drafting was satisfactory. In inking comparative soundings on the sheet, the fathometer sounding was placed on the position and the vertical cast above or below with the abbreviation V. C. instead of as penciled on the sheet by the field party. See Descriptive Report.
8. Recommendation. - This sheet (H. 5253) is the basic survey of the area represented and is considered satisfactory for charting purposes.
9. This survey was accomplished entirely with the fathometer, and is an outstanding example of degree of accuracy possible with this device. There are more than 600 crossings, most of which are perfect and very seldom differing by more than 2%.
10. The bank noted in paragraph 3 shows very uneven bottom in places, and the development is not sufficient to give assurance that the least depth was obtained. All sounding on the bank was done with the fathometer. Additional development should have been done by drifting across the shoal indications. This should have been accomplished on the 10, 12 and 13 fathom spots near the center of the bank, and also on the 14 fathom sounding on the northwest side of the bank and the detached 18 and 19 fathom soundings to the southward.

The location of this bank makes it very important that ^{the least depth} ~~it~~ be accurately charted. The entire area of the bank, including the offlying 18 and 19

H. 5253 - 2

fathom spots should be wire dragged. No bottoms were obtained on the bank and this deficiency should be supplied.

11. Reviewed by R. J. Christman, Sept. 23, 1933.


Inspected: E. P. Ellis.


Chief, Field Records Section.


Chief, Field Work Section.

Examined and approved:


Chief, Division of Charts.


Chief, Division of H. & T.

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. **5253**

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

Number of positions on sheet	3122.
Number of positions checked	.123.
Number of positions revised	...0.
Number of soundings recorded	18891
Number of soundings revised	..28.
Number of signals erroneously plotted or transferred ✓

Date: **Sept. 18, 1933**

Cartographer: **Gaylord H. Streeter**

May 11, 1933

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in
14 volumes of sounding records for

HYDROGRAPHIC SHEET 5253

Locality Cape Chiniak to Sitkalidak Strait, South Coast of Kodiak
Island, Alaska

Chief of Party: F.B.T. Siems in 1932

Plane of reference is mean lower low water, reading

4.6 ft. on tide staff at Port Hobron

11.6 ft. below B. M. 1

4.0 ft. on tide staff at Kodiak

19.9 ft. below B. M. 8

Height of mean higher high water above plane of reference is 8.3 feet at
Port Hobron; 8.8 feet at Kodiak

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.

Ady Hammer
Chief, Division of Tides and Currents.