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FORM 594
Rev. April 1936

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

~~TEMPORARY~~ } **Field No. 1240**
Hydrographic } *Sheet No.*

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

JUN 18 1942

Acc. No. _____

State ~~Alaska~~ Alaska

LOCALITY

Alaska Peninsula, Belkofski Bay
Kitchen Anchorage & Captain Harbor

1942

CHIEF OF PARTY

S. G. Mattison

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REG. NO. H6716

11-6716

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. 1240

REGISTER NO. H6716

State ALASKA

General locality ALASKA PENINSULA, BELKOFSKI Bay

Locality CAPTAIN HARBOR AND KITCHEN ANCHORAGE *BELKOFSKI BAY

Scale 1/10,000 Date of survey Sept. 10-13, 19 41

Vessel SURVEYOR

Chief of Party G.C. MATTISON

Surveyed by A.C. THORSEN, G.A. NELSON, V.M. GIEBENS, J.C. PARTINGTON.

Protracted by E.E. SMITH

Soundings penciled by E.E. SMITH

Soundings in fathoms ~~feet~~ FATHOMS

Plane of reference M L L W

Subdivision of wire dragged areas by

Inked by C.E. Dennis 8/31/42

Verified by " "

Instructions dated APRIL 6, 19 39

Remarks: Smooth sheet and plotting by Seattle

Processing Office.

GENERAL DESCRIPTION

These small bays show remarkably smooth bottom. The outer part has depths suitable for anchorage where convenient, except close to the north shore.

Ten fathoms can be carried into the outer part of Captain Harbor and this part has general depths of 8 to 12 fathoms.

Depths of 4 to 8 fathoms prevail over most of the inner part of Captain Harbor and the 3 fathom curve carries practically to the head of the bay, affording good shelter for small boats.

LOW WATER LINE

This piece of work was finished with great expedition late in the season by the field party. The low water line on the east side follows close to the high water mark. Along the north shore from stations APPLE to RAY, the low water line developed by hydrography moves the line as shown by the topographic sheet outward for a considerable extent. Between station RAY and signal Cap, the innermost line of soundings is very shoal but did not cross over low water mark. It is probable that the line shown by topographic party should be extended outward considerably.

topographic low
waterline accepted.
See par. 10-Review

25

JUNCTIONS

This sheet joins H-4490⁽¹⁹²⁵⁾ which is not available for comparison.

Junction
satisfactory

DISCREPANCIES

Near Lat. 55° 09.6', Long. 162° 05.7', the line from positions 34c to 36c crosses over 18c - 19c, 28c - 29c, and 30c - 31c, with
The differences noted above were largely removed by replotting with changes in signals as noted in sounding books.

half to one fathom shoaler depths. Likewise the line from positions 38c to 40c shows about 1/2 fathom shoaler soundings than the closely adjacent lines. Otherwise, except for occasional differences on steep slopes near shore, the agreement of the soundings is very good.

BAR

At the entrance to Captain Harbor a slight bar extends off the north side with a shoalest sounding of $7\frac{3}{4}$ fms. near the middle of the entrance - see position 165b. See par 8-Review

25

TIDE REDUCERS

Reducers for tide were taken from automatic tide gage at King Cove.

STATISTICS

Positions	683
Soundings	3767
Statute miles of sounding line.	86.2
Area in square statute miles.	3

Report written in Seattle Processing Office,

E. E. Smith
Assoc. Cartographic Engineer

Forwarded, approved

Officer in Charge
Seattle Processing Office.

H6716

TIDAL NOTE

Sheet Field No. 1240

King Cove Standard Gage:

Latitude	55° 03.7' N.
Longitude.	162° 19.1' W.
Staff reading of MLLW.	6.24 ft.
Highest tide on staff.	ft.
Lowest tide on staff	ft.

Surveys Section (Chart Division)

H6716

HYDROGRAPHIC SURVEY NO.

Records accompanying survey:

Boat sheets ~~two~~; sounding vols. (3); wire drag vols.;
 bomb vols.; graphic recorder rolls (2) (in one envelope)
 special reports, etc. ~~one overlay tracing of field plotting~~.....

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

Number of positions on sheet	683.
Number of positions checked	3.
Number of positions revised	0.
Number of soundings recorded	3767.
Number of soundings revised (refers to depth only)	11.
Number of soundings erroneously spaced	0.
Number of signals erroneously plotted or transferred	0.
Topographic details	Time 1 hr.
Junctions	Time 0.
Verification of soundings from graphic record	Time 0.

Verification by *C.E. Dennis*..... Total time $\frac{22\frac{1}{2}}{5} 27\frac{1}{2}$ Date *8/21/42.*
G.F. Jordan

Review by *G.F. Jordan*..... Time 14... Date *9/4/42.*

Remarks

Decisions

1		550620 U.S.G.B
2		" "
3		" "
4		
5	Location of tide staff	"
6	For tide	U.S.G.B
7		
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GEOGRAPHIC NAMES
 Survey No. **H6716**

Name on Survey	Source										
	A	B	C	D	E	F	G	H	K		
<u>Belkofski Bay</u>											1
<u>Captain Harbor</u>											2
<u>Kitchen Anchorage</u>											3
											4
<u>King Cove</u>											5
<u>Alaska Peninsula</u>											6
											7
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											27

Names underlined in red approved
 by L. Heck on 7/31/42

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
~~PHOTOSTAT OF~~

No. H **H6716**
~~No. H~~

received **June 18, 1942**
registered **July 11, 1942**
verified
reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
24			
✓ 25	<i>pg 283</i>	<i>afm.</i>	
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	H. W. Knox
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Rwk

RAC
HAR

TIDE NOTE FOR HYDROGRAPHIC SHEET

July 30, 1942.

~~Division of Hydrography and Topography:~~

✓ Division of Charts: Attention: Mr. H. R. Edmonston

Plane of reference approved in
3 volumes of sounding records for

HYDROGRAPHIC SHEET 6716

Locality Captain Harbor and Kitchen Anchorage, Alaska Peninsula,
Belkofski Bay, Alaska.

Chief of Party: G. C. Mattison in 1941
Plane of reference is mean lower low water reading
6.2 ft. on tide staff at King Cove
23.0 ft. below B. M. 2

Height of mean high water above plane of reference is 6.1 feet.

Condition of records satisfactory except as noted below:

Han
Atty Chief, Division of Tides and Currents.

DIVISION OF CHARTS

SURVEYS SECTION

REVIEW OF HYDROGRAPHIC SURVEY

REGISTER NO. 6716
Field No. 1240

Alaska Peninsula, Belkofski Bay
Surveyed in September 1941; Scale 1:10,000
Instructions dated April 6, 1939

Soundings:

808 Fathometer

Control:

Visual three-point fix

Chief of Party - G. C. Mattison
Surveyed by - Ship's Officers
Protracted by - E. E. Smith
Soundings plotted by - E. E. Smith
Verified and inked by - C. E. Dennis
Reviewed by - G. F. Jordan
Inspected by - H. R. Edmonston

1. Shoreline and Signals

The origin of the shoreline and signals is given on the first page of the descriptive report.

2. Sounding Line Crossings

Satisfactory.

3. Depth Curves

The depth curves are satisfactory with the exception of the low water curve which is discussed in Par. 10.

4. Junctions with Contemporary Surveys

The present survey was recommended in the review of H-4490 (1925), paragraphs 8b and 8c, and covers the N.E. section of this prior survey. A satisfactory "butt junction" is made with it.

5. Comparison with Prior Surveys

H-3306 (1911)

A reconnaissance line at the N.E. end of the prior survey overlaps the present work. The soundings on

that line are in very poor agreement with the present survey, the differences varying from 3-70fm. in 180fm. This discrepancy is believed due to lack of adequate signal control at the head of Belkopski Bay on the prior survey.

H-4490 (1925)

The present survey is in good agreement with this prior survey with the exception that, out from 15fm. depths, the present depths are 2fm. shoaler in the area south of Lat. 55°08.3'.

A 10-fm. sounding on the prior survey at Lat. 55°07.89', Long. 162°07.0', charted on 8703, falls in a closely developed area of 13fm. on the present survey. This sounding is actually 10-3/4fm. in the records and is believed to be in error, as two "misses" follow it in the records and, also, because of the smooth 13-fm. bottom indicated by the closely spaced lines on the present survey. The 10-3/4 (10fm. charted) sounding should be disregarded.

T-4144 (1925)

It is to be noted that this prior topographic survey shows kelp close to the east shore from the southern limits of the present survey to inside the entrance to Captain Harbor. No kelp is indicated on T-6883 (1941), or the present survey.

6. Comparison with Chart 8703 (latest print of 6-23-42)

- (a) Within the area of the present survey this chart is compiled from H-4490 (1925). The one disagreement has been discussed under a preceding paragraph.
- (b) There are no dredged channels nor aids to navigation within the present survey.

7. Condition of Survey

- (a) The sounding records are satisfactory.
- (b) The descriptive report was written by the Processing Office and covers all matters of importance.
- (c) The plotting by the Processing Office is satisfactory except that a rechecking of the fathogram

in some instances would have resulted in eliminating many irregular points and bights in the depth curves. The more important irregularities have been disposed of.

8. Compliance with Instructions for the Project

The general scope and development is very good and complies with the specific instructions. However, it is to be noted that the 7-3/4-fm. sounding mentioned in the descriptive report at Lat. 55°09.1', Long. 162°06.73' is reasonably assumed to be the least depth on a mud or sand bar in the middle of the entrance to Captain Harbor. This assumption is not definite as this 7-3/4fm. sounding, substantiated by 8-1/2fm. and 8-3/4fm. soundings on lines slightly south but not plotted, falls on the end of the bar rather than shoreward.

Although the soundings in this area are adequate for normal draft vessels and for charting, a few drift soundings and bottom characteristics at this position would have been conclusive.

9. Additional Field Work Recommended

None.

10. Low Water Line

The descriptive report refers to discrepancies between the present hydrographic and topographic (T-6883 (1941)) surveys in delineating the low water line. It is pointed out in that reference that the soundings did not cross over the low water line and, for that reason, the hydrographic low water line has been eliminated where this condition exists.

However, there are places where the zero soundings on the present survey are considerably farther from shore than the topographic low water line. This discrepancy is considered to be due to the use of the fathom phase on the fathometer, resulting in interference, in shoal water, between the recordings of the bottom and the initial. A more accurate low water line and, also, more regular curves would have been possible had the A and B phase, in feet, been used in Captain Harbor where the depths are under 11 fm. and the slopes steep.


The zero soundings have been eliminated and the low water line taken from T-6883 (1941).

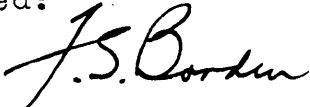
11. Superseded Surveys

The present survey supersedes the following surveys with the exception of bottom characteristics:


H-3306 (1911) in part
H-4490 (1925) " "

Examined and approved:


Chief, Surveys Section


Chief, Division of Charts


Chief, Section of Hydrography


Chief, Division of Coastal Surveys

Applied to chart 8703

Sept. 16, 1942

J. K. S.

replot → as given

c
28 - (29 using Car as left object)

c
30 using Ben as left object

31 as given

32 as given

33 c using Ben as left object

34 c ~~as given~~ " mac "

35 c as given