

8299

Diag. Cht. Nos. 8802-3 & 8860-3.

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. PF-2556 Office No. H-8299

LOCALITY

State Alaska

General locality North Side Alaska Penin-
sula

Locality Southwest of Cape Glazenap

19456

CHIEF OF PARTY

John Bowie

LIBRARY & ARCHIVES

DATE November 27, 1956

6638

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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.

REGISTER No. H-8299

Field No. PF-2556

State ALASKA

General locality North side of Alaska Peninsula

Locality South West of Cape Glazenap

Scale 1:20,000 Date of survey August 1956

Instructions dated 20 December 1954, 21 October 1955

Vessel PATHFINDER Launches No. 1 and No. 2

Chief of party John Bowie

Surveyed by F. X. Popper

Soundings taken by ~~fathometer~~ graphic recorder, hand lead, wire

Fathograms scaled by Ship personnel

Fathograms checked by Ship personnel

Protracted by R. Frost

Soundings penciled by R. Frost

Soundings in fathoms ~~feet~~ at ~~MEWL~~ MLLW and are true depths

REMARKS: _____

Handwritten initials/signature

Special Fathometer Report 151
Report Shoran corrections 152

DESCRIPTIVE REPORT TO ACCOMPANY

HYDROGRAPHIC SURVEY H-8299 (PF-2556)

NORTH SIDE ALASKA PENINSULA

SCALE: 1:20,000

AUGUST 1956

USCGSS PATHFINDER

JOHN BOWIE, COMDG.

A. PROJECT:

This survey is a part of Project 13750. Original Instructions were dated 20 December 1954 and Supplemental Instructions were dated 21 October 1955, both issued by the Director.

B. SURVEY LIMITS AND DATES:

This survey covers part of the area between latitudes $55^{\circ}09.6'$ and $55^{\circ}13.1'$ and longitudes $163^{\circ}09'$ and $163^{\circ}23'$. Junctions were made with contemporary surveys H-8300 to the east and H-8303 to the northwest. (1956) (1957)

C. VESSELS AND EQUIPMENT:

Launch No. 1 was equipped with 808-type graphic recorder No. 74S and shoran receiver No. 581.

Launch No. 2 was equipped with 808-type graphic recorder No. 46 and shoran receiver No. 1313.

The fathometer units were mounted in launch keels. All fathometers were calibrated for 800 fathoms per second.

The launches operated from the ship.

D. TIDE AND CURRENT STATIONS:

No tide or current stations were observed within the limits of this survey. Corrections for tides were obtained from tides recorded by a portable automatic gage in operation off the east shore of Amak Island (latitude $55^{\circ}24.8'$, longitude $163^{\circ}06.9'$). No time or range corrections were believed necessary for these tides. See TIDE NOTE attached.

E. SMOOTH SHEET:

The smooth sheet was made by hand by ship personnel. It was worked on in a room that was sometimes cold and damp and other times quite warm. Because of this the sheet's distortion varied consider-

ably. This was taken into account while working on the sheet and it is believed relative positions are satisfactorily accurate.

F. CONTROL STATIONS:

Triangulation stations GLAZENAP, 1952; NORMA, 1952; and PRONE, 1952 appear on this sheet. A short traverse was run from PRONE to locate OLE. Sextant fixes using GLAZENAP, OLE, and NORMA were taken to determine shoran corrections. *IV, 294*

G. SHORELINE AND TOPOGRAPHY:

The shoreline was transferred from Advance Manuscript T-11476. No discrepancies were noted.

Foul areas close to the beach made it impracticable to determine the low water line with hydrography.

H. SOUNDINGS:

Soundings were recorded in fathoms with 808-type portable fathometers. Corrections determined from bar checks (See FATHOMETER CORRECTIONS REPORT) and for tides were applied.

I. CONTROL OF HYDROGRAPHY:

Horizontal control was by shoran distances. Stations were located at GLAZENAP, 1952; WIND, 1923; and aboard the PATHFINDER while at anchor. Shoran corrections were determined from visual 3-point fixes. See SHORAN CORRECTIONS REPORT.

J. ADEQUACY OF SURVEY:

This survey is complete and adequate and should supersede all prior surveys.

Junctions with contemporary surveys H-8300 to the east and H-8303 to the northwest are very good. *(1957)*
(1956)

K. CROSSLINES:

About ten per cent of the hydrography are crosslines. All crossings are good.

L. COMPARISON WITH PRIOR SURVEYS:

No prior surveys are available for comparison.

M. COMPARISON WITH CHART:

There are but two soundings on charts 8860 and 8802 that appear in the area of this survey. One is about one fathom deeper and the other one fathom shoaler than those obtained in the areas with this survey. Not enough soundings are available to determine whether these differences were because of measured depths or a change in datum. ✓

✓ P6
Review

N. DANGERS AND SHOALS:

Except for foul areas close to the beach, there are no dangers or shoals within the limits of this survey. ✓

O. COAST PILOT INFORMATION:

See COAST PILOT NOTES attached. ✓

P. AIDS TO NAVIGATION:

There are no aids to navigation within the area of this survey. ✓

Q. LANDMARKS FOR CHARTS:

No landmarks are recommended for charting within the area of this survey. ✓

R. GEOGRAPHIC NAMES:

No geographic names are recommended for this area. ✓

S. SILTED AREAS:

No silted areas were detected. ✓

T. BY-PRODUCT INFORMATION:

No bottom specimens were taken within the small area of this survey, however adjoining surveys indicate the Bottom to be fine gray or black sand. ✓

✓ P7c
Review

Z. TABULATION OF APPLICABLE DATA:

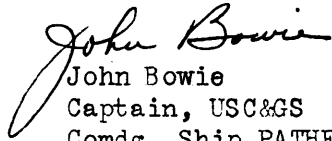
1. Fathometer Corrections Report
2. Shoran Corrections Report
3. Field Edit Report Sheet T-11476

Respectfully submitted,



John O. Boyer
LCDR, USC&GS

APPROVED AND FORWARDED:



John Bowie
Captain, USC&GS
Comdg. Ship PATHFINDER

From Isanotski Strait to Cape Glazenap, about 19 miles, the coast retains the same general direction. It is low with grassy bluffs in places, 50 to 100 feet high.

Cape Glazenap (lat. 55° 15' n., Long. 163° 01' W) is prominent in that it is higher - 175 feet - than any part of the coast in this general locality. This high land marks the southwest entrance to Izembek Lagoon.

Izembek Lagoon covers a large area bordered mostly by low marshes. It is crossed in many directions by sloughs of shallow depths. Most of the lagoon is bare or awash at low tide. The bottom is mud and sand. The channels that exist are difficult to follow except at low tide stages and is not recommended for craft drawing more than 3 or 4 feet.

The entrance channel at Cape Glazenap is narrow and shifting. Breakers make out for about 1 mile off the entrance. In 1956 the channel depth was 1 fathom. It is between breakers and lies close to Cape Glazenap. Fishermen mark the entrance to the channel by a gas drum buoy during the summer.

The wreck of an old schooner is a conspicuous landmark.

The channel from Cape Glazenap to Grant Point is narrow and crooked. Local knowledge should be obtained before entering Izembek Lagoon.

Glen and Operl Islands are low, narrow, grass covered islands extending between Cape Glazenap and Moffet Point along the northwest side of Izembek Lagoon.

Lights from the radio towers at Cold Bay are visible for about 20 miles on clear nights.

AMAK ISLAND TO PORT MOLLER

CHART 8802

Amak Island is of volcanic origin, 1791 feet in height and almost round. Its north-south width is 2.4 miles; east-west width 2.0 miles. The beaches are mostly huge boulders and bluffs except at the south, where there is a small flat. A small airstrip was built here during World War II. There is foul ground off the north side of the island; several rocks and reefs and Sealion Rock, 2-1/2 miles to the northwest. The latter is 95 feet high and its southern slope occupied by an extensive rookery of sea lions.

COAST PILOT NOTES

SHIP PATHFINDER

PROJECT CS-13750, JUNE - SEPT. 1956

SHEETS 2256, 2556, 2756, 2856

The following is submitted to supersede the text in the U. S. Coast Pilot - Alaska - Part II - Yakutat Bay to Arctic Ocean - Fifth (1947) Edition from Line 41, Page 510 through Line 10, Page 512.

Amak Island is 10 miles N.N.W. of Cape Glazenap. The passage between Amak Island and the islands bordering Izembek Lagoon is clear and is the usual track for small vessels and fishing boats. Depths in the center of the passage are 10 fathoms or better. Currents are about 2 knots. A reef lies off the southeast end of Amak Island. It extends eastward 1/3 mile and bares on low tides. This reef should be given a wide berth.

No anchorages are recommended but in emergencies, small craft can obtain a little protection from westerly weather by anchoring in the lee of the east side.

SEALION ROCK LIGHT, 92 feet above the water, is located near the top of Sealion Rock. It is a weak light and not visible from the south as the top of the small white box structure is several feet lower than the high point of the rock.

MOFFET POINT is a curving sandy hook with sand dunes 40 to 60 feet in height. A channel between Operl Island and Moffet Point leads into the northeastern part of Izembek Lagoon. The channel leads through breakers and during the summer is marked by gas drum buoys by local fishermen. In 1956 the depth over the bar was 2 fathoms. Passage should not be attempted without local knowledge and only then with small boats of 3 or 4 feet draft.

MOFFET LAGOON is shallow and crossed by numerous gulleys. The bottom is sand and mud, and bares over an extensive area at low tide. Moffet Lagoon joins Izembek Lagoon via an opening between Moffet Point and Elaine Point. Joshua Green River empties into Moffet Lagoon.

JOHN BOWIE
CAPTAIN, C&GS
COMDG. SHIP PATHFINDER

STATISTICS

HYDROGRAPHIC SURVEY H-8399 (PF-2556)

<u>VOLUME NUMBER</u>	<u>DAY LETTER</u>	<u>DATE 1956</u>	<u>NUMBER OF POSITIONS</u>	<u>STAT. MI. SOUNDINGS</u>
<u>Launch No. 2</u>				
1	a (purple)	22 Aug.	137	27.7
1	b	23 Aug.	<u>52</u>	<u>9.2</u>
Launch No. 2 Totals			189	36.9
<u>Launch No. 1</u>				
2	a (blue)	31 Aug.	183	36.3
2	b	2 Sept.	<u>99</u>	<u>18.7</u>
Launch No. 1 Totals			282	55.0
Totals for all launches			471	91.9

Total area of survey = 15.7 square statute miles.

TIDE NOTE

HYDROGRAPHIC SURVEY H-8299 (PF-2556)

A portable automatic tide gage was in operation during this survey at latitude $55^{\circ} 24.8'$, longitude $163^{\circ} 06.9'$ on the east side of Amak Island.

Corrections from observed tides referred to MLLW were applied to all soundings. No differential for time or range was believed necessary.

FATHOMETER CORRECTIONS

HYDROGRAPHIC SURVEY H-8299 (PF-2556)

Launch No. 1 Fathometer No. 74S Initial set 0.4 fms.

<u>Fathometer Reading</u>	<u>Correction</u>
0.0 to 18.0 fms	0.0 fms.
18.1 to end	+0.1 fms.

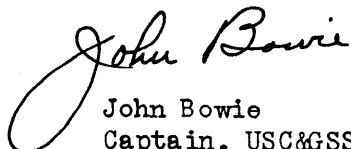
Launch No. 2 Fathometer No. 46 Initial set 0.3 fms.

<u>Fathometer Reading</u>	<u>Correction</u>
0.0 to 3.2 fms	-0.2 fms
3.3 to 5.8	-0.1 fms
5.9 to 9.4	0.0 fms
9.5 to end	+0.1 fms

APPROVAL SHEET

HYDROGRAPHIC SURVEY H-8299 (PF-2556)

This survey was done under my close supervision. I consider this survey complete and adequate for charting. No additional work is recommended within the area covered.



John Bowie
Captain, USC&GSS
Comdg. Ship PATHFINDER

GEOGRAPHIC NAMES
 Survey No. H-8299

Name on Survey										
	A	B	C	D	E	F	G	H	K	
<u>Alaska</u>			(For title)							1
<u>Alaska Peninsula</u>									B-N	2
<u>Bering Sea</u>										3
<u>Cape Glazenap</u>			(title only)							4
										5
					Names approved					6
					12-10-56. L. Heck					7
										8
<u>Amak Island</u>			(tide station)							9
										10
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										12
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Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. ..8299..

Records accompanying survey:

Boat sheets ..1...; sounding vols. ...2..; wire drag vols.; bomb vols.; graphic recorder rolls 2-Envelopes special reports, etc. .1-Descriptive report and 1-Smooth sheet. .2-Special Reports with Shore and Fahtometer Corrections,..... see Descriptive Report H-8297.

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

Number of positions on sheet	.....	471
Number of positions checked	.....	30
Number of positions revised	.....	0
Number of soundings revised (refers to depth only)	.....	34
Number of soundings erroneously spaced	.....	0
Number of signals erroneously plotted or transferred	.....	0
Topographic details	Time	..... 2
Junctions	Time	..... 2
Verification of soundings from graphic record	Time	..... 2

Verification by *O. Svendsen*..... Total time *26 hrs.* Date *2-12-58*

Reviewed by *Ju Jesbend*..... Time *1.0* Date *3-4-58*

TIDE NOTE FOR HYDROGRAPHIC SHEET

Chart Division: R. H. Carstens:

10 December 1956

Plane of reference approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 8299

Locality North Side of Alaska Peninsula

Chief of Party: J. Bowie in 1956

Plane of reference is mean lower low water, reading
2.5 ft. on tide staff at Amak Island
16.4 ft. below B.M. 2 (1941)

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

Condition of records satisfactory except as noted below:


Signature

Chief, Tides Branch

DIVISION OF CHARTS

REVIEW SECTION-- NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8299

FIELD NO. PF-2556

Alaska, North side of Alaska Peninsula, S. W. of Cape Glazenap

Surveyed: August 1956

Scale 1:20,000

Project No. 13750

Soundings:

Control:

808 Fathometer

Shoran

Chief of Party - J. Bowie
Surveyed by - F. X. Popper
Protracted by - R. Frost
Soundings plotted by - R. Frost
Verified and inked by - O. Svendsen
Reviewed by - I. M. Zeskind
Inspected by - R. H. Carstens

Date: 3-14-58

1. Shoreline and Control

The shoreline originates with unreviewed air-photographic survey T-11476 (1952-54-56).

The source of the control is given in the Descriptive Report

2. Sounding Line Crossings

Depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

Apparently the verifier had inked the 4 + 6 fms - not erased L.S.S.
The usual depth curves were adequately developed, except close inshore where foul area prevented development to the low-water line. 9/23/58

The bottom is fairly smooth, except in depths less than 1 fm. where it is slightly irregular.

4. Junctions with Contemporary Surveys

The junctions with H-8300 (1957) on the east and H-8303 (1956) on the north will be considered in the reviews of those surveys. The project survey on the southwest has not yet been received in the Washington Office.

5. Comparison with Prior Surveys

There are no prior surveys by this Bureau in the area of the present survey.

6. Comparison with Chart 8802 (Latest print date 7-9-56)
Chart 8860 (Latest print date 7-20-53)

A. Hydrography

There are only 2 charted soundings falling within the area of the present survey. These soundings originate with information obtained prior to 1913 from sources other than this Bureau and afford no basis for an adequate comparison with present depths.

The present survey supersedes the charted information within the common area.

B. Aids to Navigation

There are no aids to navigation within the area of the present survey.

7. Condition of Survey

a. The sounding records and Descriptive Report are complete and comprehensive.

b. The smooth plotting was accurately done.

c. No bottom characteristics were obtained within the area of the present survey.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions, except as noted in paragraph 7c above.

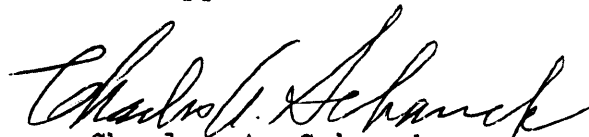
9. Additional Field Work Recommended

The survey is considered basic and no additional field work is recommended. Attention, however, is directed to the fact that no bottom characteristics were obtained in this area.

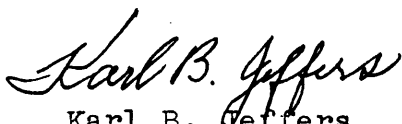
Examined and approved:



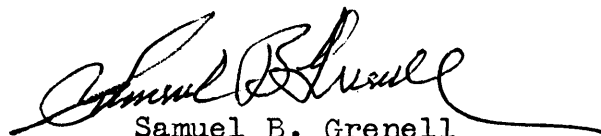
Max G. Ricketts
Chief, Nautical Chart Branch



Charles A. Schanck
Chief, Division of Charts



Karl B. Jeffers
Chief, Hydrography Branch



Samuel B. Grenell
Chief, Division of Coastal Surveys

