

8229

Diag. Cht. No. 8102-3.

Form 504

U. S. COAST AND GEODETIC SURVEY  
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic  
Field No. PA-1155 Office No. H-8229

LOCALITY

State S. E. Alaska  
General locality Prince of Wales Island  
Locality Klakas Inlet

19 55

CHIEF OF PARTY

J. C. Partington

LIBRARY & ARCHIVES

DATE April 8, 1958

B-1870-1 (1)

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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-8229

Field No. PA-1155

State *SE* Alaska

General locality *Prince of Wales Island*  
~~South-East Alaska~~

Locality Klakas Inlet

Scale 1:10,000 Date of survey 13 April - 30 April 1955

Instructions dated 7 January 1955

Vessel USC&GSS PATTON

Chief of party J. C. Partington

Surveyed by W. C. Russell and F. J. Tucker

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

Fathograms scaled by F. J. Tucker and P. T. Padiangco

Fathograms checked by D. A. Doe and W. L. Piner

Protracted by C. A. J. Pauw

Soundings penciled by C. A. J. Pauw

Soundings in fathoms ~~feet~~ at ~~MLW~~ MLLW and are based on a  
REMARKS: *velocity of sound of 800 fms/sec.*

DESCRIPTIVE REPORT TO ACCOMPANY

HYDROGRAPHIC SURVEY NO. H-8229 (PA-1155)

KLAKAS INLET, S. E. ALASKA

SCALE 1:10,000 - DATE 1955

U.S. C. & G. S. PATTON, J. C. PARTINGTON, COMDG.

#####

A. PROJECT:

This survey was accomplished under Revised Instructions - Project 1357, dated 7 January 1955, issued by The Director. ✓

B. SURVEY LIMITS AND DATES:

This sheet covers all of Klakas Inlet north of Latitude 55° - 00.5'. ✓  
*on the south*

Junction was made at Latitude 55° - 00.5' with Sheet No. H-8129 (1:10,000, 1954). ✓

Field work was started on 13 April 1955 and was completed on 30 April 1955. ✓

C. VESSEL AND EQUIPMENT:

All hydrography was done in Launch No. 87 operating from the PATTON. Soundings were taken with an 808-A recording fathometer No. 51, supplemented by hand lead soundings on shoals and rocks. Bottom samples were taken by wire with hand sounding machine mounted on the launch. ✓

D. TIDES AND CURRENT STATIONS:

The tide station used for the entire sheet was established near the head of Klakas Inlet, \* as prescribed in the Project Instructions. No time or range corrections were required. \* *at signal "Ida"*

No current stations were occupied within the limits of this survey. ✓

E. SMOOTH SHEET:

The smooth sheet <sup>1495</sup> will be constructed by personnel of the Seattle Processing Office, and will be plotted by that office.

F. CONTROL STATIONS:

There was no triangulation control established within the area. Hydrographic control was located by use of the field photographs and incomplete manuscripts T-11035 and T-11295. The Photogrammetric Field Report, Project 6117, has been forwarded to the Washington Office. *Advance prints 1953-54*

G. SHORELINE AND TOPOGRAPHY:

The shoreline and topography will be compiled from air photographs which were field inspected by this party during the current season. The delineation of the shoreline ledges and offlying rocks, as transferred to the boat sheet from the incomplete manuscripts, were checked during the hydrographic surveys. No shoreline discrepancy was noted. *sec P 1 Review*

The rock shown on the manuscript in Latitude  $55^{\circ} - 04.60'$ , Longitude  $132^{\circ} - 23.95'$  does not exist and should not be charted. *Rock is not shown on advance manuscript T-11295 (1953-54-57)*

Due to steep and rocky shore, it was impractical to delineate the low water line in all cases. At the mouth of the larger creeks, there usually were tide flats which dropped off abruptly at the outer edge. The dotted line, shown on the boatsheet outside of high water line, delineates the low waterline. Sounding lines were run as close to the beach as circumstances would permit.

H. SOUNDINGS:

Soundings were taken with an 808 type recording fathometer No. 51 operated on the fathom scale. A few hand lead soundings were made on shoals and isolated rocks. Wire soundings were taken when obtaining the bottom samples.

The fathometer initial was set at zero on the fathogram and bar checks taken three times daily at 2, 4, and 7 fathoms. The recorded index corrections together with the phase comparisons have been applied as one correction in the sounding volumes. A summary of the index and phase corrections are given in table 2, following this report.

The wire soundings, especially in deep water, did not agree favorably with the corrected fathometer sounding, due principally to a soft, green, mud bottom. As a result, the wire soundings, in general, always read 2 to 4 fathoms deeper.

I. CONTROL OF HYDROGRAPHY:

The hydrography was controlled by three point sextant fixes on signals ashore. No unusual or substandard methods were used for this purpose.

J. ADEQUACY OF SURVEY:

This survey is complete and adequate for charting purposes. Junction with adjoining sheet, H-8129, is satisfactory and no holidays exist. Although the depth changes very rapidly, depth curves can be adequately drawn at the junction. *1954*

K. CROSSLINES:

There are approximately 9.7 miles of crosslines or approximately 10% of total hydrography is crosslines. All crossings appear to be satisfactory. ✓

L. COMPARISON WITH PRIOR SURVEYS:

No prior surveys exist in this area. ✓

M. COMPARISON WITH CHART:

This survey was compared with the latest edition of Chart 8117. No soundings are shown on the chart in the area covered by this survey. The shoreline on the chart is only approximate and no comparison was made with the topographic manuscript. ✓ *PG REVIEW*

N. DANGERS AND SHOALS:

The main channel is free of shoals and there are no dangers to navigation except when within 100 meters of the beach, and at the head of the inlet. The entire shoreline was inspected at low water or at minus tide and all rocks, either shown on the manuscript or discovered during hydrography, that could be reached by the launch, were located by sextant locations and recorded in the sounding volumes, and noted on the boat sheet. The head of the inlet is foul and so noted on the boat sheet. ✓

O. COAST PILOT INFORMATION:

Klakas Inlet is deep with depths up to 10<sup>4</sup> fathoms in the center. No dangers to normal navigation exist except within 100 yards of the beach. Safe passage can be made by following mid-channel courses to within about five fathoms, at the head of the inlet. ✓

No anchorages for large craft exist in the area. Temporary anchorage for small craft may be had at numerous places along the beach. It is believed that strong williwaw winds may be experienced in this area. The survey ship did not anchor within the limits of the sheet. ✓

During the period of this survey, good weather conditions were experienced, but the period was so brief, no statement regarding weather can be made. ✓

The effect of currents were not noticeable. ✓

P. AIDS TO NAVIGATION:

No aids to navigation exist within the limits of this survey. ✓

Q. LANDMARKS FOR CHARTS:

No landmarks for charts exist within the limits of this survey. ✓

R. GEOGRAPHIC NAMES:

No geographic names other than KLAKAS INLET and KLAKAS LAKE appear on Chart 8117 are recommended. ✓

S. SILTED AREAS:

No significant silted areas were noted but the general bot- ✓  
tom characteristic is soft green mud.

T. BY-PRODUCT INFORMATION:

Some shrimping activity was noted in Klakas Inlet, but the ✓  
extent of the catch is unknown.

U. MARKED STATIONS:

The following stations were marked by standard topographic ✓  
disks: GAL, QUO.

Z. TABULATION OF APPLICABLE DATA:

Tidal Data ✓

Air Photographs

Respectfully submitted by

*William C. Russell*

William C. Russell  
CDR, USC&GS

Forwarded:

*J. T. Jarman*  
J. T. Jarman  
CDR USC&GS  
Cmdg., Ship PATTON

TABLE NO. 1

STATISTICS FOR HYDROGRAPHIC SURVEY

H-8229, PA-1155

VOLUME	DAY	DATE	VESSEL	POSITIONS	STAT. MI.	HAND LEAD AND WIRE SOUNDINGS
1	a	19 April	Launch 87	148	29.4	-
1 & 2	b	20 "	"	111	15.7	3
2	c	26 "	"	134	11.9	4
3	d	27 "	"	161	14.3	2
3 & 4	e	28 "	"	74	7.5	13
4	f	29 "	"	<u>113</u>	<u>17.4</u>	<u>2</u>
TOTALS				741	96.2	24

Area = 4.9 sq. stat. miles

TABLE NO. 2

FATHOMETER CORRECTIONS - (PHASE AND INDEX)

808 FATHOMETER NO. 51

Average of Index Corrections on A scale = +0.3 fathoms

Average of Phase Corrections on A - B scale = +1.0 fathoms

Average of Phase Corrections on B - C scale = -0.2 fathom

INDEX AND PHASE CORRECTIONS APPLIED TO THE SOUNDINGS:

Index Correction to A scale = +0.3 fathom

Index and Phase Correction to B scale = +1.3 fathoms

Index and Phase Correction to C scale = +1.1 fathoms



TIDE NOTE FOR HYDROGRAPHIC SURVEY

H-8229, FIELD NO. PA-1155

Tide Station - <sup>Topographic</sup> ~~Hydrographic~~ Signal IDA ✓

Upper end of Klakas Inlet: - Latitude  $55^{\circ} - 03.78''$

Longitude  $132^{\circ} - 23.88''$

MLLW on staff = 9.1 feet

SMOOTH SHEET

The smooth sheet was hand constructed in the Seattle Hydrographic Processing Unit using standard methods of construction and checking. ✓

SHORELINE AND TOPOGRAPHY

The shoreline and offshore detail were transferred from <sup>Advance M/S of</sup> T-11035 and T-11295. ~~and T-11298~~ of 1953-54-57.

The dotted low water line, mentioned in the field report, was not shown on the smooth sheet where it was in conflict with the soundings. ✓

ADEQUACY OF SURVEY

The survey appears to be complete and adequate for charting. Comparison of the junction with H8129 was not made on the smooth sheet because no copy of that survey was available in the processing office. See P 4  
Review

COMPARISON WITH CHART

The smooth sheet was compared with Chart 8147, 4th Ed., rev. 10/7/57, which was made from the boat sheet. Several soundings were found that differed from the smooth sheet depths by a fathom or two, presumably because of the difference between the boat sheet and smooth sheet soundings. Two rocks, one at Lat. 55° 03'63", Long. 132° 24'58", and the other at Lat. 55° 02'92", Long. 132° 24'92", are shown on the chart as sunken rocks. These rocks are on the smooth sheet as rocks awash at MLLW. One other rock ledge awash at Lat. 55° 03'30", Long. 132° 24'63", is ~~not~~ shown on the chart. \* shown thus # which means less than 2 ft above MLLW - correctly charted.

DANGERS AND SHOALS

A two (2) fathom sounding shown at Lat. 55° 04'52", Long. 132° 23'92", appears to be questionable. On the fathogram for position 30 c is a trace that looks very much like a sounding or a side echo and was recorded as such and plotted on the smooth sheet. The question arises from the fact that there is no trace or indication of a shoal on other lines which cross in that immediate area. ✓

*interpreted as stray and should be disregarded*  
EHC

Respectfully submitted

*William M. Martin*  
William M. Martin  
Supervisory Cartographer C&GS

Approved and forwarded

*E. H. Kirsch*  
E. H. KIRSCH  
Captain C&GS  
Seattle District Officer

GEOGRAPHIC NAMES PENCILED ON H-8229

KLAKAS INLET

PRINCE OF WALES ISLAND

GEOGRAPHIC NAMES

Survey No. H-8229

Name on Survey	A	B	C	D	E	F	G	H	K	
<u>Southeast Alaska</u>			(title)							1
<u>Klakas Inlet</u>			(tide station)							2
<u>Prince of Wales Island</u>										3
										4
										5
										6
					Names approved 4-21-58					7
					L Hawk					8
										9
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										27

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8229...

Records accompanying survey:

Boat sheets 1...; sounding vols. 4...; wire drag vols. ....;  
 bomb vols. ....; graphic recorder rolls 2-Envelopes  
 special reports, etc. 1-Smooth sheet and 1-Descriptive report,  
 .....

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

Number of positions on sheet	.....	741
Number of positions checked	.....	45
Number of positions revised	.....	5
Number of soundings revised (refers to depth only)	.....	20
Number of soundings erroneously spaced	.....	21
Number of signals erroneously plotted or transferred	.....	0
Topographic details	Time	16
Junctions	Time	2
Verification of soundings from graphic record	Time	2

Verification by *F. P. Saulsbury* ..... Total time 103 hrs Date 6-15-59..

Reviewed by *Anderson* ..... Time 21... Date 6-25-59

DIVISION OF CHARTS  
REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8229

FIELD NO. PA-1155

S.E. Alaska, Prince of Wales Island,  
Klakas Inlet

Surveyed - April 1955

Scale: 1:10,000

Project No. 1357

Soundings: 808 Depth Recorder  
Wire and Hand lead

Control: Sextant fixes  
on shore  
signals

Chief of Party - J. C. Partington  
Surveyed by - W. C. Russell and F. J. Ticker  
Protracted by C. A. J. Pauw (Seattle P.O.)  
Soundings plotted by - C. A. J. Pauw  
Verified and inked by - F. P. Saulsbury  
Reviewed by - I. M. Zeskind 6-24-59  
Inspected by - R. H. Carstens

1. Shoreline and Control

The shoreline originates with unreviewed air-photographic surveys T-11035, T-11295 and T-11298 of 1953-54-55.

The source of the control is given in the Descriptive Report.

2. Sounding Line Crossings

The sounding line crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves were adequately delineated, except close inshore where the steep shore and foul character of the bottom sometimes prevented development to the low-water line.

The bottom is very irregular and generally drops abruptly to depths of 40-50 fms. and then gradually to the center of the Inlet where depths as great as 104 fms. are found.

4. Junctions with Contemporary Surveys

An adequate junction was effected with H-8129(1954) on the south. The survey extends to the head of Klakas Inlet on the north.

5. Comparison with Prior Surveys

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

6. Comparison with Chart 8147 (latest print date 10-7-57)

A. Hydrography

The charted hydrography originated with the boat sheet of the present survey (Bp 52785). A comparison between the charted and present survey depths reveals only minor differences of 1 fm. or less.

Differences are noted in the position of the 5- and 10-fm. curves charted from the boat sheet soundings. The 0.9fm. reef in lat.  $55^{\circ}03.7'$ , long.  $132^{\circ}24.45'$  has not been charted.

The present survey supersedes the charted information.

B. Aids to Navigation

There are no aids to navigation within the limits 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.

8. Compliance with Project Instructions

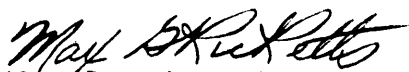
The survey adequately complies with the Project Instructions.

9. Additional Field Work Recommended

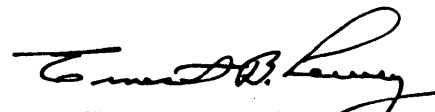
The survey is considered basic and no additional field work is recommended.

H-8229(1955)-3

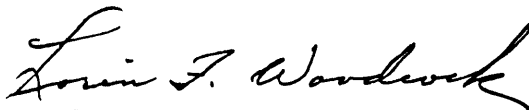
EXAMINED AND APPROVED:



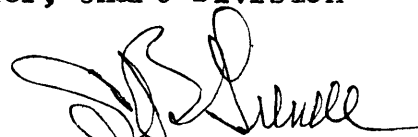
Max G. Ricketts  
Chief, Nautical Chart Branch



Ernest B. Loney  
Chief, Chart Division



Lorin F. Woodcock  
Chief, Hydrography Branch



Samuel B. Grenell  
Chief, Coastal Surveys Division



TIDE NOTE FOR HYDROGRAPHIC SHEET

Chart Division: R. H. Carstens

25 April 1958

Plane of reference approved in  
4 volumes of sounding records for

HYDROGRAPHIC SHEET 8229

Locality Klakas Inlet, Alaska

Chief of Party: J. C. Partington in 1955

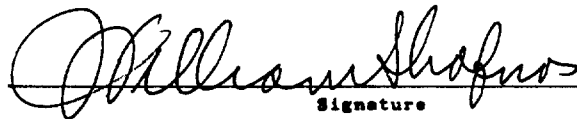
Plane of reference is mean lower low water, reading

9.1ft. on tide staff at Klakas Inlet

16.1ft. below B.M. 1 (1955)

Height of mean high water above plane of reference is 11.6 feet.

Condition of records satisfactory except as noted below:

  
Signature

Chief, Tides Branch

