

6874

Diag'd. on Diag. Ch. No. 9198

Form 504

U. S. COAST AND GEODETIC SURVEY  
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC  
Field No. DE-4245 Office No. 6874

LOCALITY

State Alaska - Aleutian Islands  
General locality Attu Island  
Locality Northeast of Sarana Bay

194 5

CHIEF OF PARTY  
J. C. Wilder

LIBRARY & ARCHIVES

DATE MAR 19 1946

6874

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REG. NO.

H6874

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

6874

REGISTER No. \_\_\_\_\_

Field No. DE-4245

State Alaska - Aleutian Islands

General locality ~~Near Islands~~ Attu Island

Locality ~~North and East of Attu Island~~ Northeast of Sarana Bay

Scale 1:40,000 Date of survey 7 to 28 July 1945 ✓

Instructions dated 16 April 1943 ✓

Vessel DERICKSON ✓

Chief of party L. C. Wilder ✓

Surveyed by L. C. Wilder ✓

Soundings taken by ~~C. C. ...~~, graphic recorder, ~~...~~ ✓

Protracted by Marion T. Gwinn

Soundings penciled by Marion T. Gwinn

Soundings in fathoms ~~...~~ at ~~...~~ MLLW ✓

REMARKS: Smooth sheet and plotting by Seattle Processing Office

DESCRIPTIVE REPORT

To Accompany  
**6874**  
Hydrographic Sheet 6874 (Field No. DE-4245)  
Scale 1:40,000  
Off Sarana Bay, North Coast Attu Island, Alaska  
L. C. Wilder, Chief of Party  
U.S.C. & G.S.S. DERICKSON  
1945

PROJECT: This hydrography was accomplished under Project CS-218, dated 16 April 1943, and supplemental instructions of 1 February 1944 and 29 January 1945.

SURVEY LIMITS AND DATES: This sheet covers offshore hydrography northeastward of sheet H-6991 (SURVEYOR, 1:20,000, approaches to Sarana Bay). It carries out to between 600 and 1200 fathoms. It joins H-7017 and H-7019 to the northwest, H-6939 and H-6936 to the east, and H-6991 to the southeast. This hydrography was accomplished between 7 July and 28 July 1945. The work was accomplished mostly in running to and from working grounds.

VESSEL AND EQUIPMENT: The Ship DERICKSON, with 808A and NMC fathometers, was used.

TIDES AND CURRENTS: Tide gages were in operation in Massacre Bay and Chichagof Harbor. No current observations were made.

CONTROL STATIONS: Control consisted mostly of triangulation stations established in 1943 and 1944 by the U. S. Navy, EXPLORER, and SURVEYOR. Several stations located by theodolite cuts by the SURVEYOR in the vicinity of Sarana Bay were used.

SHORELINE AND TOPOGRAPHY: No shoreline was transferred to the sheet. The shoreline is obtainable from compilation of air photographs.

SOUNDINGS: The sounding unit is fathoms. No unusual methods were used.

CONTROL OF HYDROGRAPHY: Standard three point fixes.

ADEQUACY OF SURVEY: This survey is considered adequate for the area covered.

COMPARISON WITH PRIOR SURVEYS AND CHART: This survey covers an area in which there were a few scattered soundings and no comparison can be made.

STATISTICS FOR HYDROGRAPHIC SURVEY H 6871 (DE-4245)

U.S.C. & G.S.S. DERICKSON - 1945

Vol. No.	Day Letter	Date 1945	No. Sdgs. H.L.	No. Positions	No. of Statute Miles Sdgs.
1	A	7 July	---	25	13.9
1	B	8 July	---	24	15.1
1	C	12 July	---	36	24.3
1	D	13 July	---	97	80.2
1	E	27 July	3	21	16.3
1	F	28 July	---	13	5.4
TOTALS			3	216	155.2

Sounding with type 808A Depth Recorder and NMC. Continuous profile on all lines.

Area covered by survey = 51.3 sq. statute miles.

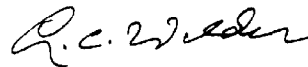
DANGERS AND SHOALS: No dangers or shoals were found. ✓

COAST PILOT NOTES: Submitted, under separate report, for the entire ✓  
season's operations.

AIDS TO NAVIGATION: None. ✓

GEOGRAPHIC NAMES: Covered on larger scale inshore surveys.

Respectfully submitted,



L. C. Wilder,  
Lt. Comdr., U.S.C. & G.S.,  
Chief of Party.

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TIDE NOTE

A portable automatic tide gage was maintained at the U.S.A.A.F. pier in Chicago Harbor; Latitude  $52^{\circ}-55.9' N$ , Longitude  $173^{\circ}-14.2' E$ . The observed tides at this station were used for the reduction of all soundings taken on this sheet. Several days' tides are missing during the series. When sounding, during these periods, the tide staff was read and these heights have been used in lieu of the maregrams. They are recorded in the sounding for Sheet No. DE-025245. The height of mean lower low water and mean high water correspond to readings of 3.3 feet and 6.9 feet, respectively, on the tide staff. (See Director's letter of 24 August 1945, reference 36-mlh). No time or height corrections have been applied to the observed tides.

APPROVAL SHEET

30 November 1945

6874

The records and boat sheet for Survey H \_\_\_\_\_  
(DE-4245) are approved.

The records were examined frequently in the field,  
generally daily.

The survey is considered complete and adequate.  
The Descriptive Report covers all pertinent details.



L. C. Wilder,  
Lt. Comdr., U.S.C. & G.S.,  
Chief of Party.

PROCESSING OFFICE NOTES

DATUM

U.S.N. (Gannet) 1934. ✓

CONTROL

All signals are computed points, triangulation or fourth-order topographic stations. ✓

CROSSINGS

Good.

BOAT SHEET

Field work is unfinished. Boat sheet has been retained for additional work in 1946. - (*extension of limits*)



GEOGRAPHIC NAME LIST

H-6874 (DE-4245)

North and East of Attu Island

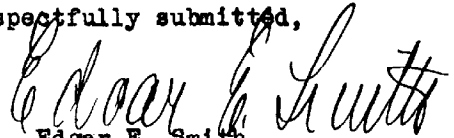
Geographic names penciled on smooth sheet:

ATTU ISLAND

BERING SEA

APPROVAL SHEET

Respectfully submitted,



Edgar E. Smith  
Capt. Engineer

Forwarded, approved:



F.B.T. Siems, Capt., C&GS  
Officer in Charge  
Seattle Processing Office.

GEOGRAPHIC NAMES

Survey No.

**H6874**

Name on Survey

	A	B	C	D	E	F	G	H	K
	On Chart No.	On previous survey No.	On U. S. Quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
<u>Bering Sea</u>								US&B	1
<u>Attu Island</u>								"	2
<u>Sarana Bay</u>									3
									4
									5
									6
									7
<u>Chicago Harbor</u> (location of tide staff)									8
									9
									10
									11
									12
									13
									14
									15
									16
									17
									18
									19
									20
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									27

by L. Heck on 7/14/46

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. ...H6874

Records accompanying survey:

Boat sheets <sup>Retained by</sup> ~~field~~ <sup>field</sup>; sounding vols. 1....; wire drag vols. ....;  
 bomb vols. ....; graphic recorder rolls 2....;  
 special reports, etc. ....  
 .....

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

Number of positions on sheet	.....	216
Number of positions checked	.....	27
Number of positions revised	.....	4
Number of soundings revised (refers to depth only)	.....	3
Number of soundings erroneously spaced	.....	8
Number of signals erroneously plotted or transferred	.....	0
Topographic details - <i>stations research</i>	Time	12 hrs
Junctions	Time	20 hrs
Verification of soundings from graphic record	Time	22 hrs

Verification by *F. Bell* ..... Total time 104 ..... Date 6/14/46

Reviewed by *J. F. Jordan* ..... Time 7 ..... Date 6/24/46

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 6874

FIELD NO. DE-4245

Alaska-Aleutian Islands, Attu Island, Northeast of Sarana Bay  
Surveyed in July 1945  
Project No. CS-218

Scale 1:40,000

Soundings:

308A Fathometer  
NMC Fathometer

Control:

Three-point fixes on shore  
signals

Chief of Party - L. C. Wilder  
Surveyed by - L. C. Wilder  
Protracted by - M. T. Gwinn  
Soundings plotted by - M. T. Gwinn  
Verified and inked by - F. H. Bell  
Reviewed by - G. F. Jordan, June 24, 1946  
Inspected by - H. W. Murray

1. Shoreline and Control

The source of control is explained in the descriptive report.

No shoreline is shown on this offshore survey.

2. Sounding Line Crossings

Satisfactory.

3. Depth Curves and Bottom Configuration

Depth curves could be satisfactorily drawn.

This small survey shows no outstanding features in the 50 to 1200-fm. depths on the northeast side of Attu Island.

4. Junctions with Contemporary Surveys

Satisfactory junctions are effected on the west with H-7017 and H-7019 (1944-45) and on the south with H-6939 (1943-44). The junction in the east with H-6936 (1943) is satisfactory except for a 60-fm. disagreement at a crossing in 900-fm. depths at lat.  $52^{\circ} 58'$ , long.  $173^{\circ} 31.2'$ . The deeper conflicting sounding from H-6936 (1943) has been omitted. Junctions on the southwest will be considered when H-6991 (1944) and H-7088 (1945) are verified.

5. Prior Surveys

There are no prior surveys by this Bureau in this area.

6. Comparison with Chart 9198 (Print date of Feb. 2, 1945)

a. Hydrography

Depths under 100 fathoms charted from overlapping surveys agree with the present survey. However, soundings on the present survey are 200 to 400-fm. shoaler than charted 720 to 1195-fm. soundings carried forward from H.O. Chart Misc. No. 10253-1. The present survey, within the area covered, should supersede the charted hydrography.

b. Aids to Navigation

No aids to navigation are charted in this area.

7. Condition of Survey

- a. The sounding records and the descriptive report are complete in all detail and the smooth plotting is satisfactory.
- b. Only three closely-grouped bottom characteristics were obtained in the 50 square mile area of the survey.

8.

Compliance with Project Instructions


The survey satisfactorily complies with the project instructions.

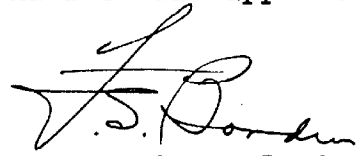
Attention is directed to paragraph 3842 of the Hydrographic Manual, especially to the seventh sub-paragraph, regarding bottom characteristics.

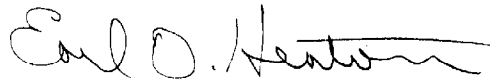
9. Additional Field Work Recommended

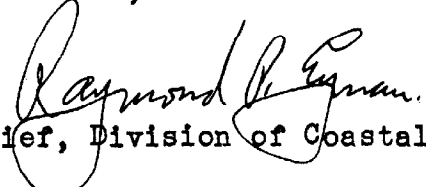
This is a basic survey and no additional work is recommended. (See par. 7b, above).

Examined and approved:

  
Chief, Nautical Chart Branch

  
Chief, Chart Division

  
Chief, Section of Hydrography

  
Chief, Division of Coastal Surveys

*Murray*

TIDE NOTE FOR HYDROGRAPHIC SHEET

May 24, 1946

~~Division of Hydrography and Topography~~

Division of Charts: H. W. MURRAY

Plane of reference approved in  
1 volumes of sounding records for

HYDROGRAPHIC SHEET 6874

Locality Near Islands, Alaska

Chief of Party: L. C. Wilder in 1945  
Plane of reference is mean lower low water, reading  
3.3 ft. on tide staff at Chichagof Harbor  
12.8 ft. below B. M. 1

Height of mean high water above plane of reference is 3.6 feet.

Condition of records satisfactory except as noted below:

*C. K. Green*  
Chief, Division of Tides and Currents.



