

8454

Diag. Cht. No. 8863-3.

FORM C&GS-504

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. EX-005158 Office No. H-8454

LOCALITY

State Alaska

General locality Aleutian Islands-Adak Island

Locality Sweeper Cove

1958

CHIEF OF PARTY

G. C. Mast

LIBRARY & ARCHIVES

DATE 10-30-58

8454

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. 8454

Field No. EX-005158

State Alaska

General locality Aleutian Islands - Adak Island

Locality Sweeper Cove, ~~Petroleum Facilities Wharf~~

Scale 1:480 Date of survey 19 August, 1958 ^{- Sept 13,}

Instructions dated Special Survey - no specific instructions

Vessel Ship EXPLORER

Chief of party G. C. Mast

Surveyed by L. D. Thurman

Soundings taken by fathometer, ^{Leadline} ~~graphical recorder, hand lead, wire~~

Fathograms scaled by J. P. Coleman

Fathograms checked by L. D. Thurman

Protracted by L. D. Thurman

Soundings penciled by L. D. Thurman, W. L. Mobley, E. L. Talbot

Soundings in ~~fathoms~~ feet at ~~MLLW~~ MLLW ^{and are based on a velocity of sound of 500 fms / second}

REMARKS: This special survey was performed in order that necessary corrections can be applied to chart 9119.

DESCRIPTIVE REPORT TO ACCOMPANY

HYDROGRAPHIC SURVEY

(FIELD NO. EX-005158)

Aleutian Islands, Alaska

Adak Island, Sweeper Cove

Petroleum Facilities Wharf

1958

USC&GSS EXPLORER, G. C. Mast, Comdg.

Surveyed by L. D. Thurman

This special survey was executed because of new construction in Sweeper Cove, and the need for corrections to C&GS Chart 9119. ✓

The survey covers the area immediately around pier 9 in Sweeper Cove. The present edition of Chart 9119 shows pier 9 and 10. Due to new construction, the old wooden piers have been removed and replaced by a single concrete pier. ✓ The new pier will be the petroleum facilities wharf, known locally as pier 9, fuel pier. ✓

Work was begun on 18 August 1958, and ended 13 September 1958. ✓

Hydrography was done by EXPLORER launch No. 2 and a 20-foot skiff operating from the ship. Model 808 fathometer No. 57-27, calibrated for 800 fm/sec, and leadline No. 1, graduated in feet, were used for all sounding. ✓ All soundings are in feet and are corrected for initial, phase, and tide corrections. ✓

Hydrography was controlled by visual ^{fixes} and tagline ^{measurements} fixes. The visual hydrography was controlled by a system of ranges and/or a 90° sextant angle. ✓ The main system of ranges (drift ranges) was parallel to the face of the pier. Additional ranges (rate range) were set 700 feet north and south from the centerline of the pier roadway. The 90° intersection of the drift range with the rate range controlled the ends of the visual sounding lines. ✓ The intermediate visual positions were controlled by the drift range and a 90° sextant angle with four signals located on the pier. The tagline positions were controlled by two taglines from the pier. ✓

All tide reducers were obtained by reading the staff at the standard tide gage located on pier 7, Sweeper Cove, Adak, Alaska. ✓

Two points (9 NORTH, 9 SOUTH), one on each end of the new pier, were located by theodolite cuts from LEE (USN) 1933, MOUNT "X" (USE 1942) 1943, and SWEEPER (USE 1942) 1943.

The breakwater light at the entrance of Sweeper Cove was also located by theodolite cuts from the above stations. The light list indicates this structure rebuilt in 1952.

This survey is complete and ^hould supersede prior surveys for charting. ✓

Respectively submitted,

Loyd D. Thurman

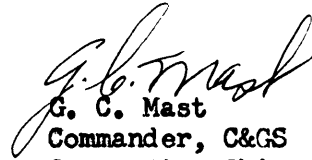
Loyd D. Thurman
Ensign, C&GS

APPROVAL NOTE

(EX-005158)

H-8454 (1958)

This sheet along with supporting records has been examined and is approved and forwarded.



G. C. Mast
Commander, C&GS
Commanding Ship EXPLORER

GEOGRAPHIC NAMES

Survey No. H-8454

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>Alaska</u>			(title)							1
<u>Aleutian Islands</u>			"							2
<u>Adak Island</u>			"						BGN	3
<u>Sweeper Cove</u>			"		(tide station)				"	4
										5
										6
										7
					Names approved 11-18-58					8
									L. Heck	9
										10
										11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. ...⁸⁴⁵⁴...

Records accompanying survey:

Boat sheets ...⁰...; sounding vols. ...²...; wire drag vols.; bomb vols.; graphic recorder rolls ~~1-Envelope~~ special reports, etc. ~~1-Smooth sheet, 1-Descriptive report, and 1-Plot plan, Petroleum Wharf, (Plot plan not part of records)~~

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

Number of positions on sheet	227
Number of positions checked	0
Number of positions revised	0
Number of soundings revised (refers to depth only) <i>added seven intermediate sdgs.</i>	103
Number of soundings erroneously spaced	49
Number of signals erroneously plotted or transferred	0
Topographic details	Time 2 hrs
Junctions	Time 28 hrs
Verification of soundings from graphic record	Time 4 hrs

Verification by *F. SAULSBURY* Total time 92 Date 10-15-73

Reviewed by *R.W. Derkazarian* Time 72 Date 04-30-74

Inspected by *D.V. Romeburg* Time 34 Date 5-9-74
Caustano 9 5/15/74

H-8454

Items for Future Presurvey Review

A future survey in this area should include an investigation of the two obstructions not disproved by this survey in lat. $51^{\circ}51.25'$, long. $176^{\circ}39.06'$ and the piling near the wharf. The bottom is generally stable though additional dredging may be done.

<u>Position Index</u>		<u>Bottom Change</u>	<u>Use</u>	<u>Resurvey</u>
<u>Lat.</u>	<u>Long.</u>	<u>Index</u>	<u>Index</u>	<u>Cycle</u>
515	1764	2	0	50 Years

OFFICE OF MARINE SURVEYS AND MAPS

MARINE CHART DIVISION

HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-8454

FIELD NO. EX-005158

Alaska, Aleutian Islands-Adak Island, Sweeper Cove

SURVEYED: August 19 - September 13, 1958

SCALE: 1:480

PROJECT NO.: SSP-0958

SOUNDINGS: 808 Depth Recorder
Leadline

CONTROL: Tagline Measurements
and Sextant angles

Chief of Party..... G. C. Mast
Surveyed by..... L. D. Thurman
Protracted by..... L. D. Thurman
Soundings Plotted by..... L. D. Thurman
..... W. L. Mobley
..... E. L. Talbot
Verified and Inked by..... F. P. Saulsbury
Reviewed by..... R. W. Derkazarian
Inspected by..... Date: April 29, 1974
..... D. J. Romesburg

1. Description of the Area

This survey covers the area surrounding the petroleum facilities wharf on the western end of Sweeper Cove.

The bottom is smooth and slopes gently from inshore depths of three to four feet to maximum depths over 70 feet.

2. Control and Shoreline

The origin of control is adequately described in the Descriptive Report.

The shoreline originates with a Department of Navy Plot Plan (BP-57303) dated February 14, 1957.

3. Hydrography

A. No cross lines were run on the present survey.

B. The usual depth curves are adequately delineated.

C. The development of the bottom configuration and the investigation of least depths are considered adequate.

2.

4. Condition of the Survey

The sounding records, smooth plotting and Descriptive Report are adequate and conform to the Hydrographic Manual except as follows:

- A. Bottom samples were not taken during the hydrographic field work.
- B. No boat sheet was forwarded with the survey.
- C. The projection was computed and ruled after verification.
- D. Several stamps in the records were not completed according to Hydrographic Manual requirements.

5. Junctions

A butt junction was effected with H-7825 (1951), which completely surrounds the present survey.

6. Comparison with Prior Surveys

- A. H-6915 (1943) 1:5,000
H-7084 (1945) 1:5,000

These prior surveys were compared with and are superseded by the survey discussed below. Further consideration in the present review is not deemed necessary.

- B. H-7825 (1951) 1:2,500

This prior survey supplemented by soundings from H-6915 (1943) and H-7084 (1945) covers the area of the present survey. A comparison of the prior and present survey reveals substantial harbor improvements. Two piers on the prior survey have been removed and replaced by the petroleum facilities wharf depicted on the present survey. Present survey depths are deeper by one to six feet with the least change occurring in depths of 60 feet or greater. These sounding differences are attributed to dredging operations that accompanied the new pier construction.

The present survey is adequate to supersede the prior survey within the common area.

3.

7. Comparison with Chart 9119 (latest print date Dec. 30, 1972)

A. Hydrography

The charted hydrography originates with soundings from the present survey before verification, from H-6915 (1943), H-7084 (1945) and from the previously discussed prior survey which requires no further consideration. The two obstructions charted in lat. $51^{\circ}51.25'$, long. $176^{\circ}39.06'$ from Bp39895 (1945) were not disproved on the present survey and should be retained on the chart.

Except as noted above, the present survey is adequate to supersede the charted hydrography within the common area.

B. Aids to Navigation

The light (Navy maintained) located on the petroleum facilities wharf was established subsequent to the date of the present survey.

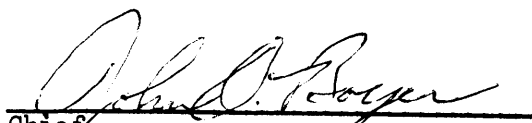
8. Compliance with Project Instructions


This survey adequately complies with project instructions.

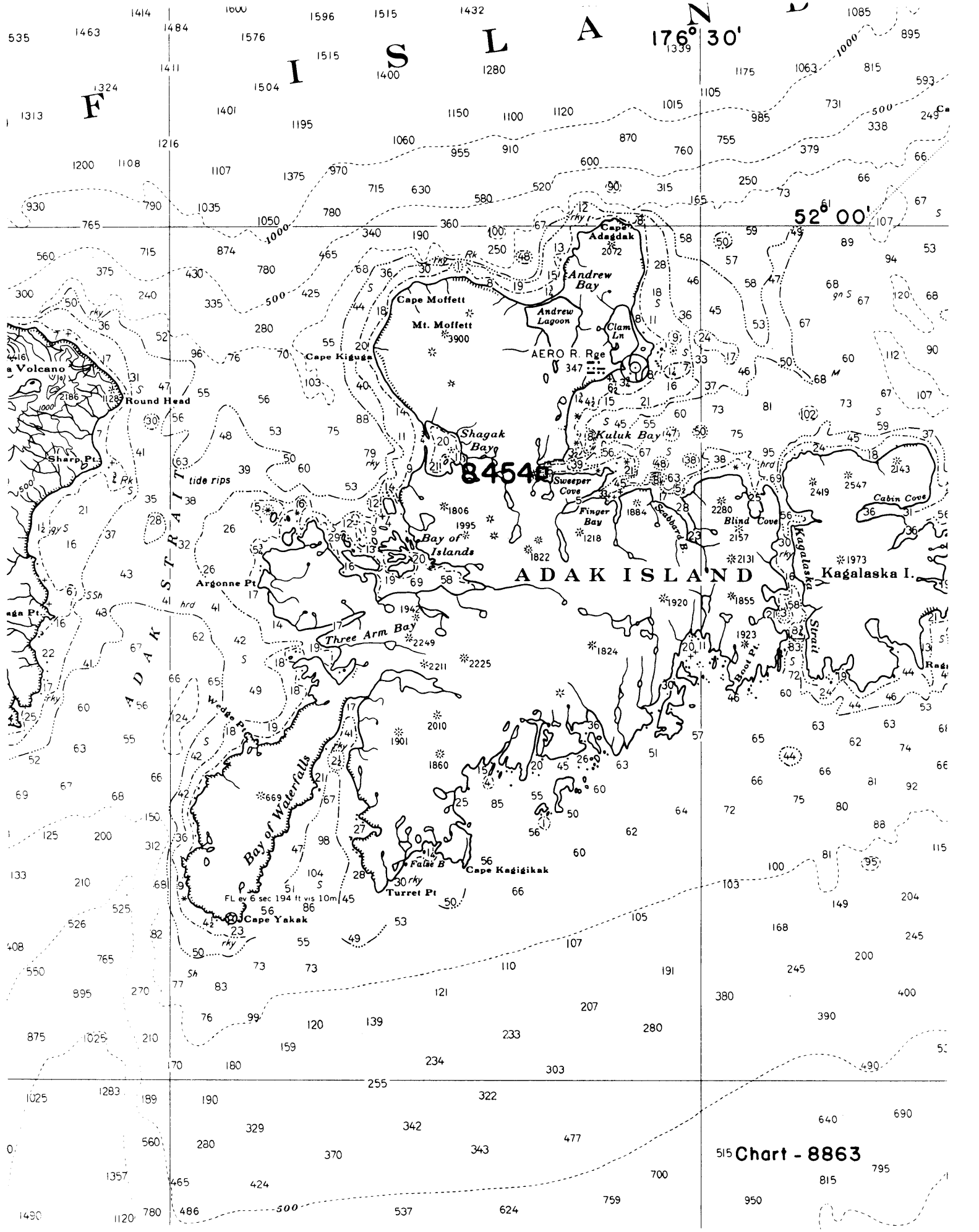
9. Additional Field Work

This survey adequately serves the purpose intended and no additional field work is recommended.

Examined and Approved:


Chief
Marine Chart Division


Associate Director
Office of Marine Surveys
and Maps



8454

515 Chart - 8863

