6703

Original

Form 504
Rev. April 1935

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

~~Topographic~~
Hydrographic } *Sheet No.* 2241

6703

State S.W. Alaska

LOCALITY

~~South Side of~~ Alaska Peninsula

Approaches to Cold Bay, Alaska.

19~~3~~41

CHIEF OF PARTY

L.D. Graham - G. C. Mattison

U. S. GOVERNMENT PRINTING OFFICE 102231

Form 537
Ed. Dec. 1930

REG. NO.

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.

Field No. 2241

REGISTER NO. H6703

State S.W. Alaska

General locality ~~South side of~~ Alaska Peninsula

Locality Approaches to Cold Bay

Scale 1:20,000 Date of survey May 31 - July 11 1941

Vessel DISCOVERER & Launch 87; SURVEYOR'S Launches 2 and 3

Chief of Party L. D. Graham - G. C. Mattison

Surveyed by C.P., L.C.J., G.E.B., A.C.T., P.C.D.

Protracted by W. M. Martin

Soundings penciled by W. M. Martin

Soundings in fathoms ~~feet~~

Plane of reference M.L.L.W.

Subdivision of wire dragged areas by

Inked by C.F. Dennis 3/17/42

Verified by " "

Instructions dated April 26, 1941

Remarks: Smooth sheet, reductions and plotting by Seattle Processing Office.

U. S. GOVERNMENT PRINTING OFFICE

NOTES FOR DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SHEET NO. 2241. H-6703 (1941)
APPROACHES TO COLD BAY, ALASKA.
SOUTH SIDE ALASKA PENINSULA.

1. AUTHORITY:

The work was performed in accordance with the Director's Supplemental Instructions dated April 26,1941, Project HT-219, 22mjc,1995 DI 4.

2. LIMITS:

This sheet is a resurvey of the approaches to Cold Bay, Alaska, and extends from Lat. 54-53' N. on the south; on the east along a line from Lat. 54-53'N., Long. 162-29.0' W. to Lat.54-56.3' N., Long. 162-28' W. to Lat. 55-00'N., Long. 162-22.0'W. thence to Lat. 55-01' N., Long.162-22.3' W. to Lat. 55-01.6' N.,Long. 162-23.0' W.; on the north from Lat. 55-01.8' N., Long. 162 -24' W. to Lat. 55-~~01.6~~ 02.0' N., Long. 162-25' W. then following along the shorelineon the five fathom curve varying from 1/8 to 1/4 mile off to Lat. 55-04.8' N. and west on this latitude to Long. 162-33' W., then to Lat. 55-05.7' N., Long. 162-34' W., and to Lat.55-05.5' N., Long. 162-35' W; and on the west side following the five fathom curve along the shoreline to ~~Thin Point Buoy N 2~~ Lat. 54°58.0', Long. 162°32.2', varying at a distance of 1/5 to 7/8 mile offshore, thence to Lat. 54-55.9' N., Long. 162-34' N. to Lat. 54-54.6' N., Long. 162-36' W., and south along this meridian to Lat. 54-53' N.

The spacing of sounding lines south of a line from Lat. 54-58.2' N., Long. 162 -32' W. to Lat. 54-58.9' N., Long. 162-30'W. and 162-29' W. to Lat. 54-58.75' N., Long. 162-28' W. to the most northerly point of Fox Island to not exceed 100 meters while the spacing of sounding lines on the rest of the sheet is not to exceed 200 meters, except where additional lines are necessary to develope shoal areas.

The sheet covers parts of Sheet Register Nos. 4314 (1923-24), 4374 (1924), and 4493 (1925) as well as shoal development on Sheet Register No. H 6590. (1940) ~~W.D.~~

Also joins current Sheet No. 4141 (H-6699(1941)) on the south and current sheets No. 2141 (HG 707(1941)) and 5A41 (1:5000) (H-6704(1941)) on the north.

3. SURVEY METHODS:

All positions were determined by sextant angles using signals located by theodolite and computed by the three point method, one hydrographic signal (CLIFF), topographic* and triangulation signals. The signals were built up tripods and whitewashes. * Only 2 topo signals. Steep and Ace are from T-6860 (1941). Shoreline is from T-4080 (1924), T-4087 (1924), T-4144 (1925) and T-4157 (1925).

The soundings were obtained on the ship using the Dorsey III fathometer, USC&GS No. 31, calibrated for a velocity of 820 fathoms per second. Soundings were recorded every twenty seconds with the ship at 2/3 speed or about 8 knots. Fathometer corrections for reduction of soundings are covered in the Fathometer Report for 1941. Around the edges of the sheet in areas too near the beach for the ship to work and off Thin Point ~~Buoy N 2~~, soundings were obtained with the Submarine Signal Portable Depth Recorder, Model 80820A, USC&GS No. ~~47~~ 46b. Soundings were recorded every twenty seconds with the launch fathometer.

4. DANGERS: (See additional notes by Processing Office)

	Position No.	Latitude	Longitude	Least Depth	Remarks.
a.	41-42 C	55-00.79' N.	162-24.60'W.	9 ~~8½~~ fms.	Sheet # H-6590 (1940)
b.	48-49 C	55-00.74'	162-25.27'	~~9½~~ fms.	" "
c.	- - -	54-59.35'	162-25.62'	13 ~~14~~ fms.	" "
d.	69a(launch)	54-58.43'	162-29.58'	4⅙ ~~4-1/6~~ fms.	" "
e.	66-67P.	54-56.12'	162-28.97'	6 fms.	Sheet # ~~2241~~ H-6703 (1941)
f.	69-70 F.	54-55.48'	162-29.68'	8 ~~9½~~ fms. ~~8¼~~	H-6711 (1941) W.D.
g.	72-73 P.	54-55.15'	162-31.16'	6⅝ ~~7~~ fms.	" "
h.	41-42 E.	54-55.92'	162-32.89'	* ~~6-5/6~~ fms. 3 4/6	H-6703 (1941)
i.	61-62 G.	54-54.69'	162-31.61'	** ~~6-5/6~~ fms.	H-4493 (1935) W.D.
j.	54-55a (Launch)	54-56.14'	162-33.66'	5 ~~3½~~ fms. - Rescanned	H-6703 " by Discoverer
k.	52-53a "	54-56.59'	162-32.91'	4⅙ ~~3½~~ fms.	" " Do " " "
l.	50-51a "	54-56.95'	162-32.36'	4⅙ ~~5-4/6~~ fms.	" " Do " " "

* Uncertain sounding due to strays. ** This area was wire dragged in 1925.

M. 53-54F (Ship) 54-54.5 162-31.18 6½ fms H-6703 Sheet # 224 Added by Process. Off.

Dangers as listed are only shoals listed so as to be brought to the attention of the cartographer. With the exception of Danger "h" there are no apparent dangers within the limits of this sheet that would endanger any except the largest vessels.

Generally speaking, except close inshore, the northern half of this sheet is deep with a fairly uniform bottom but the southern section of the sheet, especially off Vodapoini Point, West Cape, and Thin Point, has a very uneven bottom and much shoaler depths in general.

Dangers "a", "b", "c", and "d" were developed in 1940 on Sheet Register No. H-6590 (1940) and therefore the regular system of lines was run through these shoals, without additional development.

Danger "e" with 6 fathoms as least depth was found in an area of 12 fathoms as shown on the 1925 sheet, Register No. 4493. (Additional development or wire drag is recommended here.) Cleared with 35 foot effective depth on H-6711 (1941) W.D.

Danger "f" with 8½ fathoms was found in a regular depth of 11 fathoms on Sheet Register No. 4374, 1924. (If Danger "e" is wire dragged it is suggested that Danger "f" be dragged, also.) 8 fms. is a grounding from H-6711 (1941) W.D. Cleared with 44 foot effective depth.

Danger "g" with 7 6/6 fathoms is near 8½ fathoms on Sheet Register No. 4374 (1924) and could have additional development or be wire dragged. 6/6 is a sounding from H-6711 (1941) W.D. Cleared with 38 foot effective depth.

Danger "h" with 3-5/6 fathoms may be in error by one or two fathoms as record book notes that " sounding uncertain due to strays". Additional work is needed here. But as this area is kelp covered and only 0.35 miles east of Buoy N 2 off Thin Point vessels of any size would avoid this area. N 2 discontinued. C.G. N to N. 35 of 1941.

Danger "i" with a depth of 6-4/6 6/6 fathoms was wire dragged in 1925 as indicated on Sheet Register No. 4393 4493 with a least depth of 37 feet and for this reason this shoal area was not developed except for the regular system of lines that were run through it. It extends approximately 4/10 mile East and Southeast. Dangers "j", "k","and "l" are shoal soundings in the shoal area off Thin Point abd are in effect between Thin Point Buoy N 2and the shore so aren't really dangers.

All depths as listed above are for predicted tides and assumed fathometer corrections so are subject to some changes when final values are obtained. Final depths added in office

5. CHANNELS:

To carry the most water without having a crooked channel it is recommended that a buoy be placed off Danger "g" and that Thin Point Buoy N 2 be moved to Lat. 54-55.85'N. Long. 162-32.1' W., or approximaely so, which would give a clear channel and straight of 8 fathoms minimum depth with a center channel depth of 9 fathoms. Lighted fairway buoy placed in lat. 54° 55.0', long. 162° 32.4'. N 2 discontinued.

To be certain that this channel is free from pinnacle rocks it is suggested that for a distance of about one mile approximately northeast and southwest and between the recommended buoys that this area be wire dragged in the area under 10 fathoms. Shoals to the east were dragged on H-4493 (1925) W.D. and H-6711 (1941) W.D.

Then by placing another buoy to the east of Danger "d" a clear, straight channel would be had for entering Cold Bay from the southward as well as serving for a marker for Thin Point shoal areas for vessels southbound. Buoy C 3 placed in lat. 54° 58.4', long. 162° 29.4'.

6. ANCHORAGES:

No anchorages are covered by this sheet altho in fair to light weathervessels can anchor on either side of the approaches to Cold Bay, especially on the western side.

7. COMPARISON WITH PREVIOUS SURVEYS: See additional notes by Processing Office.

No comparison is attempted from the boat sheet with crossings or with previous surveys but outside of the shoals as listed the general agreement is good. This should be examined in detail when the smooth sheet is plotted.

8. WIRE DRAG CROSSINGS: See additional notes by Processing Office.

~~No wire drag has been done in the area of this sheet this year.~~

9. GEOGRAPHIC NAMES:

No new geographic names are recommended for this sheet.

10. STATISTICS:

The statistics for this sheet are as follows:

USC&GSS. DISCOVERER.

Date 1941.	Day Ltr.	No. of Soundings Wire	No. of Soundings DorseyIII	No.of Pos.	Sound.Line Stat. Mi.
5-31-41	A	-	174	30	12.4
6-3-41	B	-	549	62	28.1
6-4-41	C	1	1531	187	69.3
6-5-41	D	1	659	94	35.2
6-10-41	E	-	584	68	30.1
6-11-41	F	1	1126	133	61.3
6-12-41	G	2	983	141	52.5
6-13-41	H	1	2343	305	139.3
6-15-41	J	-	290	36	16.2
6-18-41	K	2	~~2157~~ 2118	266	118.8
6-19-41	L	1	~~1638~~ 1528	191	79.5
6-20-41	M	-	264	33	15.7
6-23-41	N	-	1109	174	60.8
6-24-41	P	2	881	117	49.6
6-25-41	Q	2	1555	220	86.3
6-26-41	R	-	215	26	13.8
6-30-41	S	1	~~1729~~ 1612	211	91.0
7-2-41	T	2	458	79	23.3
Total for sheet-ship16			~~18245~~ 17979	2373	983.2

The square statute miles of area on the ship work for this sheet is 69.0.

LAUNCH NO. 87

Date	Day Ltd.	No of Soundings 80820A Sub.Sig.	No of Pos.	Sound Line StateMi.
7-2-41	a	~~584~~ 588	85	18.2
7-11-41	b	425	56	16.0
7-27-41	c	579	128	24.8
7-30-41	d	413	89	21.8
8-7-41	e	550	152	31.9
8-8-41	f	297	95	15.2
Total for sheet -launch		~~1011~~ 2832	~~141~~ 605	~~64.8~~ 127.9

The square statute miles of area on the launch work for this sheet is 1.4.

The total square statute miles of area for this sheet is 70.4.

Launch days 5,6,7 were done by launches from the Surveyor. See final statistics by processing office.

Approved and forwarded.

L.D. Graham

L.D. Graham,Lieut.Comdr.USC&GS
Commanding Ship DISCOVERER.

Respectfully submitted,

Glendon E. Boothe

Glendon E. Boothe, Lieut.USC&GS

TIDAL DATA.

Field Sheet No. 2241. Cold Bay Approaches.

Standard Tide Gage No. 248 at King Cove, Alaska.

Latitude 55-03.7' N.

Longitude 162- 19.1' W.

M.L.LW. on Staff - - - - - 6.24 Ft.*

Highest Tide on Staff - -

Lowest Tide on Staff - - -

* Obtained by working back from Tidal Bench Marks using 1941 leveling when gage was installed on May 9,1941.

Tide reducers were obtained from the King Cove Tide Gage for this sheet without correction for time or heighth.

****

The same tide gage was used for the reduction of the soundings done by the SURVEYOR on this sheet. SURVEYOR used 6.3 feet as MLLW on staff.

Processing Office

ADDITIONAL NOTES BY SEATTLE PROCESSING OFFICE

Danger "e":

This area was covered by wire drag in 1941. H-6711 Area cleared by drag at effective depth of 5~~-4/6~~ 5/6 fathoms (~~34~~ 35 ft.).

Danger "f":

Minimum sounding on boat sheet was 8-3/4 fathoms. Area covered by wire drag in 1941. Area cleared by drag at effective depth of 7-2/6 fathoms (44 ft.). Minimum sounding found where deeper drag grounded was 8-1/2 fms. Plot grounding of 8 fms.

Danger "g":

Area covered with wire drag in 1941. Minimum sounding found on grounded drag was 6-5/6 fms. Area cleared by drag at effective depth of 6-2/6 fms. (38 ft.)

Danger "h":

This area was developed by the launch. A least depth of 4-2/6 fms. was found. However, as this is a shoal and uneven bottom, the ship sounding of 3-4/6 fms. should be retained and is plotted on the smooth sheet.

Danger "j":

~~5-2/6~~ 4 5/6 fathoms was obtained in rescanning the rolls by the DISCOVERER.

Danger "k":

4-2/6 fms. was the least water found upon rescanning the rolls by the DISCOVERER.

Danger "l":

4-2/6 fms. was the least water found upon rescanning the rolls by the DISCOVERER.

Danger "m":

Danger "m" was added by the Processing Office. Later it was found that the notes of Danger "i" apply to this shoal. From examination of Sheet Register No. 4493, (1925) W.D. it appears that this shoal sounding has been wire dragged in 1925. This should be verified by the Washington Office. ~~Present survey and H-4493 both obtained 6½ fms at this point~~

6½ on present survey; 6⅝ on H-4493. Cleared with 32 to 35 foot effective depths on H-4493.

The shoal area at Lat. 55° 58.4', Long. 162° 29.6' was wire-dragged on H-6711 (1941) W.D. Area cleared by drag at effective depth of 3-~~4/6~~ 5/6 fms. (~~22~~ 23 ft.). Sounding found at grounding of deeper drag was 4-2/6 fms. at position Lat. 55° 58.4', Long. 162° 29.6'. Minimum sounding on boat sheet was 4-1/2 fms. at Lat. 55° 58.42', Long. 162° 29.58'. 4⅝ fms on H-6590 (1940). A grounding at 55° 58.56', 162° 30.09' gave a sounding of 5-5/6 fms. This shoal is now marked with black buoy at Lat. 55° 58.38', Long. 162° 29.39'.

A development of the area near 3-4/6 fm. sounding in Lat. 55° 02.38', Long. 162° 25.92' as shown on Sheet Register No. 4314 (1923-24) failed to disclose such a shoal sounding, the soundings found being between 7 and 8 fathoms. As this shoal sounding is very close to the rocky beach it is entirely possible that this shoal exists. The only positive way to prove or disprove this is by the wire drag. As it is so close to shore it is questioned whether the value from dragging would justify the cost.

3⅝ retained.

COMPARISON WITH PREVIOUS SURVEYS

The smooth sheet has been compared with previous work in this area and is found to be in good agreement except as noted in preceding paragraph. With the use of the portable depth recorder and closer development of the area by both launch and ship, it is to be expected that more complete and accurate delineation of the depth curves is possible.

WIRE DRAG GROUNDINGS

Wire drag was used over the shoals found on the sheet as noted under "Dangers". The final effective depth cleared is shown under each case.

GEOGRAPHIC NAMES

No new geographic names are recommended for this sheet.

All shoreline was transferred from bromide of H-4314 (1923-24) and T-4157 (1925). Compared in office with original topographic surveys T-4080 (1924), T-4087 (1924), T-4144 (1925) and T-4157 (1925). Corrections made where necessary.

No Register Number for this sheet 2241 was received from the SURVEYOR. H-6703 (1941).

Jan. 1942

Philip C. Doran

Philip C. Doran
Officer in Charge
Seattle Processing Office

FINAL STATISTICS FOR SHEET 2241, COLD BAY (1941)

Statute miles of sounding line.....	1,111.1
Number of soundings.....	20,811
Number of positions	2,978
Area, square statute miles	73.8

Processing Office.

CONTROL FOR COLD BAY SOUTH OF LATITUDE 55°- 04'N.

On the west side of Cold Bay the following stations established in in 1923 were recovered: WASH, NALD, PLAT, LOR, and WHITE. There was no disc in the boulder at WHITE and recovery was doubtful, but a three point fix with a 7" theodolite on signals REEF-FOX2-COLD verified the recovery as the distances to REEF and FOX2 checked with those given in the 1923 list. Signals THIN, HILL, and PIN recovered in 1940 were used. Signals GAB, BID, and GRA were located in 1941 by means of three point fixes with a 7" theodolite and positions were computed.

On the east side of Cold Bay the following stations established in 1923 were recovered: DRU, BYRN, and BEAR. At station SHOULDER the station mark was destroyed, but Reference Mark No. 1 was recovered, its position computed and used as a magnetic station. Signal LY was built on range with SHOULDER R.M. No. 1 and PLAT and the position of LY was computed. Stations REEF, DOE, WEST, FOX2, BLINK, LUMP, SAW, and COLD recovered in 1939 and 1940 were used. Signals MUR, LUB, PIE, DIS, and COV were located in 1941 by means of three point fixes with a 7" theodolite and positions were computed. Signal CLIFF was located by means of sextant cuts from the ship. (sheet 2241)
H-6703 (1941).

It is noted that there is a difference of approximately four meters in the 1923 and the 1940 triangulation, in the computation of the geographic positions of the signals on the east side the 1923 geographic position was used for the signals in the three point problem. Any signals on the 1940 datum were shifted to the 1923 datum by applying the difference in the 1923 and the 1940 location to the 1940 location so as to bring all the stations in each problem to a common datum. In order to eliminate some inverse computations the signals on the west side were computed using the 1940 field data with a correction to stations DOE and WEST so as to shift them to the 1940 datum.

E. F. Hicks, Jr.,
Jr. H. & G. E.

GEOGRAPHIC POSITIONS SIGNALS SOUTH PART OF COLD BAY ALASKA
FOURTH ORDER CONTROL, 1941.

	Latitude Longitude			Seconds in meters	
PIE	55	02	22.40	692.7meters	(1162.7)
	162	25	27.43	487.2 "	(578.5)
LUB	55	02	43.06	1331.6 "	(523.8)
	162	26	27.15	482.2 "	(583.5)
MUR	55	03	10.98	339.5 " ~~[illegible]~~ "	(1515.9)
	162	28	02.55	~~195.0~~ "	~~(870.3)~~
				36.0	(1029.3)
DIS	55	02	03.33	103.0 "	(1752.4)
	162	24	58.58	1040.5 "	(25.2)
OOV	55	02	02.30	71.1 "	(1784.3)
	162	24	56.21	998.4 "	(67.3)
BID	54	59	45.31	1401.2 "	(454.2)
	162	34	13.44	239.0 "	(828.0)
GRA	54	57	55.51	1716.6 "	(138.8)
	162	33	07.77	138.3 "	(929.6)
GAB	55	00	37.42	1157.2 "	(698.2)
	162	34	15.46	274.8 "	(791.8)
LY	55	04	05.78	178.7 "	(1676.7)
	162	29	18.65	331.0 "	(733.8)

FATHOMETER CORRECTIONS MAY 16, 1941 to MAY 31, 1941

DEPTHS						CORRECTIONS IN FEET
2 fathoms	0 feet	to	3 fathoms	3 feet		0
3 fathoms	4 feet	to	9 fathoms	2 feet		-1
9 fathoms	3 feet	to	16 fathoms	2 feet		-2
16 fathoms	3 feet	to	23 fathoms	0 feet		-3
23 fathoms	1 feet	to	30 fathoms	2 feet		-4
30 fathoms	3 feet	to	37 fathoms	4 feet		-5
37 fathoms	5 feet	to	45 fathoms	2 feet		-6
45 fathoms	3 feet	to	52 fathoms	1 foot		-7
52 fathoms	2 feet	to	60 fathoms	0 feet		-8
60 fathoms	1 foot	to	68 fathoms	2 feet		-9
68 fathoms	3 feet	to	76 fathoms	3 feet		-10

FATHOMETER CORRECTIONS JUNE 1, 1941 to JULY 15, 1941

DEPTHS						CORRECTIONS IN FEET
2 fathoms	0 feet	to	3 fathoms	0 feet		0
3 fathoms	1 foot	to	12 fathoms	5 feet		-1
13 fathoms	0 feet	to	22 fathoms	2 feet		-2
22 fathoms	3 feet	to	30 fathoms	0 feet		-3
30 fathoms	1 foot	to	39 fathoms	4 feet		-4
39 fathoms	5 feet	to	47 fathoms	2 feet		-5
47 fathoms	3 feet	to	56 fathoms	3 feet		-6
56 fathoms	4 feet	to	65 fathoms	0 feet		-7
65 fathoms	1 foot	to	74 fathoms	1 foot		-8
74 fathoms	2 feet	to	77 fathoms	plus		-9

There is no draft correction included in above tables, and when the draft of the transceiver, recorded in sounding records at the beginning of each day, is greater than 11 feet the above corrections must be reduced by an amount equal to the difference between the draft and eleven feet. There is no draft correction for the 808 1 AS depth recorders and corrections should be taken direct from the above tables.

Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. H6703

Records accompanying survey:

Boat sheets two..; sounding vols. (13).; wire drag vols. ....;

bomb vols. .....; graphic recorder rolls .(3)..;

special reports, etc. (1).cahier containing Computations...........

....

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

Number of positions on sheet		2978
Number of positions checked		..21..
Number of positions revised		..5..
Number of soundings recorded		20811
Number of soundings revised (refers to depth only)		.35..
Number of soundings erroneously spaced		..0..
Number of signals erroneously plotted or transferred		..0..
Topographic details	Time	..2 hr. + 4 = 6
Junctions	Time	.16 hr + 20 = 36
Verification of soundings from graphic record	Time	..0..

Verification by. C. F. Dennis / J. A. McCormick .....Total time .118 hr / 24 } 142 Date 3/17/42.

Review by ....J. A. McCormick........ Time 20 hrs. Date 4/20/42.

	Remarks	Decisions
1		550625
2		545620
3		"
4		545625
5		550620
6		545620
7		550620
8		
9	For title	U.S.GB
10	Location of tide staff	550620
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		

M 234

GEOGRAPHIC NAMES

Survey No. H5703

Name on Survey	On Chart No. A,	On previous survey No. B,	On U. S. quadrangle Maps C,	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
Cold Bay										1
Deer Island										2
Fox Island										3
Thin Point										4
Vodapoini Point										5
West Cape										6
Bear Rock										7
										8
Alaska Peninsula										9
King Cove										10
										11
										12
		L Heck 5/6/44								13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

M 234

FORM M-238

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
~~PHOTOSTAT OF~~

No. H H6703

~~No. T~~

received January 28, 1942
registered January 29, 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	Pg. 4 Par 3+4	~~HR~~	
24			
25			
26			
30			
40			
62			
63			
82	4 last par		
✓ 83	Pg 2, 7, 8	HE	Merritt ✓
88			
90			

RETURN TO

82	R. W. Knox

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. June 1937

TIDE NOTE FOR HYDROGRAPHIC SHEET

February 2, 1942.

~~Division of Hydrography and Topography:~~

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

Plane of reference approved in
13 volumes of sounding records for

HYDROGRAPHIC SHEET 6703

Locality Approaches to Cold Bay, Alaska Peninsula, Southwest Alaska.

Chief of Party: L. D. Graham & 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 at King Cove.

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE 154227

DIVISION OF CHARTS

SURVEYS SECTION

REVIEW OF HYDROGRAPHIC SURVEY — REGISTER NO. 6703
Field No. 2241

S. W. Alaska; Alaska Peninsula; Approaches to Cold Bay
Surveyed in May - July 1941, Scale 1:20,000
Instructions dated April 26, 1941 (DISCOVERER)

Soundings:
Dorsey III Fathometer
808 Recorder

Control:
Sextant Fixes on Shore Signals

Chief of Party - L. D. Graham; G. C. Mattison
Surveyed by - Officers of Ships DISCOVERER and SURVEYOR
Protracted by - W. M. Martin
Soundings plotted by - W. M. Martin
Verified and inked by - C. E. Dennis
Reviewed by - J. A. McCormick, April 20, 1942
Inspected by - H. R. Edmonston

1. Shoreline and Signals

The subject is discussed in detail in the Descriptive Report, pages 2, 9, 11 and 12.

2. Sounding Line Crossings

Satisfactory.

3. Depth Curves

Satisfactory.

4. Adjoining Surveys

Excellent junctions were effected with H-6702 and H-6704 of 1941 on the north and with H-6487 (1939-40) and H-6699 (1941) on the south. Detached developments on H-6590 (1940) also fitted the 1941 work quite satisfactorily. Project instructions did not require sounding inside the 5-fathom curve in Cold Bay proper. The omitted areas were filled in with soundings transferred from H-4314 (1923-24), H-4374 (1924) and H-4493 (1925).

5. Previous Surveys

a. H-3306 (1911), 1:40,000; H-3579 (1913-14), 1:180,000

These surveys are reconnaissance and contribute little to the hydrographic information available in this area. Depths on the old surveys are only in fair agreement with later work.

b. H-4314 (1923-24), 1:20,000; H-4374 (1924), 1:20,000; H-4493 (1925), 1:20,000

Mention has already been made of these surveys in Par. 4. They are not as closely developed as the present survey; nevertheless, they are well executed and agree remarkably well with the latter. Occasional disagreement is noted as in Lat. 55°00.9', Long. 162°32.1' where depths of 19 to 27 fathoms (19 charted) on H-4314 fall in depths of 25 to 32 fathoms on the present survey. The lead line depths on H-4314 appear to have been read five fathoms in error and should be disregarded. On the other hand, a shoal indication of 22 fathoms in Lat. 54°59.5', Long. 162°24.8' on the present survey falls squarely on a 22-fathom depth on H-4493. Bottom characteristics have been carried forward over the entire area because of the scantness of such information in the 1941 records. With indicated additions, the present survey supersedes the older surveys in the common area.

6. Wire Drag Surveys

H-4493 (1925) W.D., H-6705 (1941) W.D., H-6711 (1941) W.D.

Several independent shoal investigations were made on H-4493 and H-6711 but in no case did the drag parties obtain depths materially less than those obtained by regular hydrographic methods. H-6711 cleared the 6-fathom shoal in Lat. 54°56.09', Long. 162°28.9' on the present survey with an effective depth of 35 feet. H-6705 overlaps a small area at the north end of the present survey without conflict between hydrography and effective drag depths.

7. Comparison with Chart 8701 (New Print of Feb. 27, 1942) Chart 8703 (New Print of Nov. 10, 1941)

Hydrography charted in this area is entirely from surveys discussed in the foregoing paragraphs. Critical soundings obtained in 1941 also have been charted. Navigational aids were shifted and augmented while the 1941 surveys were being made.

The present survey shows the changes except in Lat. 54°55.7', Long. 162°28' where Can Buoy No. 1 was replaced by Nun Buoy No. 2 (C.G.N. to M. 35 of 1941). Charted positions are in good agreement with those on the survey.

8. Compliance with Project Instructions

Satisfactory.

9. Additional Field Work Recommended

Attention is called to the following shoal indications:

a. Lat. 54°59.6', Long. 162°30.5'; 20 fathoms in general depths of 25 to 27 fathoms.

b. Lat. 54°59.3', Long. 162°28.2'; 19 fathoms in general depths of 25 to 30 fathoms.

c. Lat. 54°55.9', Long. 162°29.7'; 11 fathoms in general depths of 14 to 16 fathoms.

These are the most noticeable. There are several others in the vicinity of Lat. 55°00', Long. 162°25' but immediate investigation is not considered necessary in any individual case.

10. Superseded Surveys

H-3306 in part
H-3579 " "
H-4314 " "
H-4374 " "
H-4493 " "

Examined and approved:

Robert W. King
Chief, Surveys Section

F. B. Doran
Chief, Division of Charts

Fred. L. Peacock
Chief, Section of Hydrography

G. Rude
Chief, Division of Coastal Surveys

Applied to Cht. 8703 after review Apr. 23, 1942 K.R.

{ " " 8701 7/21/42 S.R. as far North as
(Used above Cht. 8703). Hydrography applied only to Lat 55°.

Applied to chart 8802 July 24, 1942 J.H.S.