9139

Diag. Cht. No. 8202-2

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT
(HYDROGRAPHIC)

Type of Survey ....HYDROGRAPHIC.....

Field No. .....FA-20-4-70.....

Office No......H-9139.....

LOCALITY

State ....ALASKA.....

General Locality ...GLACIER BAY.....

Locality ....TLINGIT PT. TO TIDAL INLET.....

.....

1970

CHIEF OF PARTY

.....CAPT. J. B. Watkins, Jr.....

LIBRARY & ARCHIVES

DATE .....MAY 12, 1972.....

☆U.S. GOVERNMENT PRINTING OFFICE: 1974-763-098

9139

FORM C&GS-537
(5-66)

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

HYDROGRAPHIC TITLE SHEET

REGISTER NO. H-9139

INSTRUCTIONS - 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. FA-20-4-70

State: Alaska

General locality: Glacier Bay ~~Southeast Alaska~~

Locality: Tlingit Pt to Tidal Inlet ~~Glacier Bay~~

Scale: 1:20,000 INSET = 1:10,000 Date of survey: June 16 to Aug. 7, 1970

Instructions dated: 26 March 1970 Project No.: OPR-460

Vessel: USC&GSS FAIRWEATHER, and Launches FA-3, FA-4, FA-6.

Chief of party: CAPT. John B. Watkins, Jr.

Surveyed by: FAIRWEATHER personnel

Soundings taken by echo sounder, hand lead, ~~pole~~: Raytheon DE-723 fathometers (Serial Nos. 550, 529, 559, 542, and 558) Ross Model 400A Fathometer (Prototype) hand lead line and Pole Soundings.

Graphic record scaled by: FAIRWEATHER personnel

Graphic record checked by: FAIRWEATHER personnel

Protracted by: Automated plot by: PMC - Gerber Digital Plotter

Soundings penciled by:

Soundings in fathoms [redacted] at [redacted] MLLW

REMARKS:

Appts, std 5-23-72
AAB.

USCOMM-DC 37009-P66

Descriptive Report

to Accompany

Hydrographic Sheet H-9139 (FA-20-4-70)

Glacier Bay, Alaska

Scale 1:20,000 (Tidal Inlet inset scale 1:10,000)

USC&GSS FAIRWEATHER (MSS 20)

CAPT. John B. Watkins, Jr. Comdg.

A. PROJECT

The survey was accomplished under OPR-460, project instructions dated 26 March 1970 and in accordance with the Pacific Marine Center OpOrder.

B. AREA SURVEYED

This survey includes Tidal Inlet and the area of Glacier Bay extending from approximately Latitude 59° 43.5'N on the south to a line connecting the mouths of Blue Mouse Cove and Tidal Inlet on the north. The area extends from the southern end of Sebree Island on the east to the mouths of Hugh Miller Inlet and Blue Mouse Cove on the west.

This sheet joins the following prior surveys: H-8817 (1944) along Latitude 59° 43.5'N, H-6576 along Lat. 59° 44.7'N and Long. 136° 10.5'W, and H-6575 (1940) and H-6576 (1940) along Longitude 136° 08.5'W. The sheet also joins the following contemporary surveys: H-9138 (FA-20-3-70) (1970), H-9142 (FA-10-7-70) (1970) and H-9143 (FA-10-8-70) (1970).

The control was established from 8 June to 27 July 1970. Hydrography extended from 16 June to 7 August 1970.

There is no prior survey of the area.

C. SOUNDING VESSELS

The ship FAIRWEATHER and three launches were used to accomplish the hydrography. The following are color codes and position numbers applicable to each vessel:

FAIRWEATHER	Violet	0229 - 0245
FA-3	Green	2001 - 2829
FA-4	Blue	4001 - 4993
FA-6	Brown	8001 - 8299

D. SOUNDING EQUIPMENT

The major part of the survey was accomplished using Raytheon DE-723 fathometers on the Ship FAIRWEATHER (Serial Nos. 550 and 529), Launch 3 (Ser. No. 559), and Launch 6 (Serial Nos. 542 and 558). The remainder of the sounding lines were run by Launch 4, using a Ross Laboratories Model 400A fathometer. Hand leadline and pole soundings were also used for detached positions.

The echo sounding velocity corrections were determined from serial temperature and salinity observations. The corrections for the launches also include bar check results; an abstract of the cumulative corrections to soundings for the survey is included with this report.

E. SMOOTH SHEET

The signal overlay was plotted by the Gerber Digital Plotter and verified by ship personnel. The position and sounding data were logged by ship personnel, with the final smooth sheet to be plotted electronically and verified by personnel at PMC.

F. CONTROL

All hydrography was accomplished using visual fix methods. The control signals were established from recovered triangulation stations and from unmarked undescribed topographic stations located by third order traverse methods. In addition, photo-identified signals were located on Advance Manuscripts, scale 1:10,000, numbers T-12760, (1964/70) T-12771, (1964/70) T-12775, (1964/70) and T-12776. (1964/70)

G. SHORELINE

Shoreline was transferred directly to the boat sheet from Advance Manuscripts T-12759, T-12760, T-12768, T-12769, T-12770, T-12771, T-12775, T-12776, and T-12777. Shoreline for the eastern end of Tidal Inlet which should appear on T-12761 was compiled by ship personnel (LTjg Allan Divis) on T-12760 using the photo-identified hydro signals as pass points. All manuscripts were photographed in 1964 with a field edit in 1970.

Shore line details were verified using field matte prints. A few minor discrepancies in the form of rock ledges and detached rocks along the shoreline were noted on the "Field Edit Ozalids" and referenced to appropriate matte prints.

The low water line could not be defined in some areas due to the steeply sloping shore.
Shoreline of Lone Island originates with planetable survey T-6754 (1940).- 1:20,000

RWD. 9/73
MJF 4/75

H. CROSSLINES

Crosslines, consisting of approximately ten percent of the regular system of sounding lines, were in good agreement except in a few cases of steep bottom profile. This is particularly evident in the vicinity of lat. 58°46.9 long. [illegible] where the bottom is highly irregular.

I. JUNCTIONS

Junctions were made with contemporary surveys H-9138 (FA-20-3-70) 1970, H-9142 (FA-10-7-70) 1970, and H-9143 (FA-10-8-70) 1970 and were complete and adequate. Junctions were also effected with H-6575 (1940) and H-6576 (1940) on the east in the vicinity of Tlingit Pt. and Sebree Island. The other junction was made on the south with H-8817 (1964).
Hydrography was done on a 1:20,000 scale overlay at the mouth of Blue Mouse Cove to insure an adequate junction with FA-10-7-70 (H-9142) and to better define the steeply sloping bottom in the area.

J. COMPARISON WITH PRIOR SURVEY

There is no prior survey of the area.

K. COMPARISON WITH THE CHART

Comparison of the survey with the small number of soundings shown on Chart No. 8202 (scale 1:209,978, 15th Edition, October 21, 1968) shows good agreement. The Obstruction Reported (PA) charted at Latitude 58° 44.5'N, Longitude 136° 24.8'W was not found (least final depth ~~10.2~~ 10.6 fathoms). However, just south of the reported obstruction at Latitude 58° 44.3'N, Longitude 136° 24.2'W ~~an obstruction was~~ dangerous rocks were found which ~~was~~ were bare 9 inches at a minus tide. In addition just west of the reported obstruction, two shoals were found: Latitude 58° 44.8'N, Longitude 136° 25.9'W and Lat. 58° 44.5'N, Long. 136° 25.9'W. These had least final depths of ~~5.2~~ 3.5 fathoms and ~~3.2~~ 1.7 fathoms.

Present information adequate for charting this area.

L. ADEQUACY OF THE SURVEY

The survey is considered complete and adequate for charting.

M. AIDS TO NAVIGATION

There are no aids to navigation in the area of the survey.

N. STATISTICS

	FAIRWEATHER	FA-3	FA-4	FA-6	TOTAL
Positions	245	829	993	299	2366
Sounding line (n.m.)	103.5	116.6	245.0	60.6	525.7
Area surveyed (sq. n.m.)	6.5	6.6	14.5	2.2	29.8
Bottom samples	11	---	---	---	11
Leadline soundings	--	02	04	--	6

O. MISCELLANEOUS

Various objects including rocks and shoal areas were located by sextant fix and plotted on the boat sheet.

P. RECOMMENDATIONS

None.

Q. REFERENCES TO REPORTS

1. Season's Report, USC&GSS FAIRWEATHER, 1970. (To be forwarded).

2. Magnetics Report, OPR-460, USC&GSS FAIRWEATHER, 1970. (To be forwarded).

3. Field Edit Report, OPR-460, USC&GSS FAIRWEATHER, 1970. (To be forwarded).

4. Fathometer Report, OPR-460, USC&GSS FAIRWEATHER, 1970. (To be forwarded).

5. Coast Pilot Report, OPR-460, USC&GSS FAIRWEATHER, 1970. (To be forwarded).

6. Triangulation Report, OPR-460, USC&GSS FAIRWEATHER, 1970. (To be forwarded).

7. Evaluation of Ross Fathometer, USC&GSS FAIRWEATHER, 1970. (Forwarded 21 August 1970).

8. Geographic Names Report, OPR-460, USC&GSS FAIRWEATHER, 1970. (To be forwarded).

Respectfully submitted,

John E. Thomasson

John E. Thomasson
ENS, USESSA

USC&GSS FAIRWEATHER

MSS 20

CAPT. John B. Watkins, Jr. Commanding

VELOCITY CORRECTIONS
Glacier Bay - 1970

Corrections to be applied to the following sheet numbers:

FA-10-7-70
FA-10-8-70

FA-20-3-70
FA-20-4-70
FA-20-5-70
FA-20-6-70

Applicable Depths (fms)	Corrections (fms)
0 - 20	0.0
20 - 50	+0.1
50 - 120	+0.2
120 - 140	+0.3
140 - 180	+0.4
180 - 200	+0.5
200 - ——	+0.9

USC&GSS FAIRWEATHER

MSS 20

CAPT. John B. Watkins, Jr. Commanding

DRAFT CORRECTIONS
Glacier Bay - 1970

Ship FAIRWEATHER Sheet Number	Date	Corrections (fms)
FA-20-3-70	6-28	+0.2
	7-06	+0.4
	7-20	+0.4
	7-23	+0.3
FA-20-4-70	6-27	+0.2
	6-28	+0.2
	7-21	+0.3
	7-24	+0.3
	7-27	+0.3
	8-07	+0.3
FA-20-6-70	8-06	+0.3

USC&GSS FAIRWEATHER

MSS 20

CAPT. John B. Watkins, Jr. Commanding

ECHO CORRECTIONS
Glacier Bay-1970

Launch FA-3 Sheet Number	Date	Correction (fms)
FA 20-3-70	6-16	+0.1
	6-17	+0.1
	6-18	+0.2
	7-24	+0.2
	7-27	+0.2
FA 20-4-70	6-18	+0.2
	6-27	+0.2
	6-28	+0.2
	7-17	+0.2
	7-20	+0.1
	7-21	+0.1
	7-22	(+0.2)
	7-23	+0.3
	7-27	+0.2
FA 20-5-70	7-14	+0.3
	7-15	(+0.2)
	7-17	+0.2
	8-03	(+0.2)
	8-04	+0.2
	8-06	+0.1
FA 10-7-70	8-02	(+0.2)
FA 10-8-70	7-29	+0.2
	7-30	(+0.2)
	7-31	+0.2
	8-02	(+0.2)

Corrections in parentheses ( ) are estimated for days when bar checks were not taken.

USC&GSS FAIRWEATHER

MSS 20

CAPT. John B. Watkins, Jr. Commanding

ECHO CORRECTIONS
Glacier Bay-1970

Launch FA-4 Sheet Number	Date	Correction (fms)
FA-20-3-70	6-09	+0.3
	6-10	+0.3
	6-11	+0.3
	7-06	+0.3
FA-20-4-70	6-16	+0.4
	6-17	+0.4
	6-20	+0.3
	6-21	(+0.2)
	6-22	+0.2
	6-23	(+0.2)
	6-24	+0.3
	6-27	+0.3
	6-28	+0.3
	8-07	+0.3
FA-20-5-70	7-13	+0.3
	7-14	(+0.3)
	7-15	+0.3
	7-16	+0.3
	7-17	(+0.3)
	7-20	+0.3
	7-29	+0.3
FA-20-6-70	8-03	+0.3
	8-04	+0.3
	8-06	(+0.3)
FA-10-7-70	7-21	+0.3
	7-22	(+0.3)
	7-23	(+0.3)
	7-24	+0.3
	7-27	(+0.3)
	7-28	+0.3
	7-31	(+0.3)
	8-07	+0.3
FA-10-8-70	7-30	+0.3
	7-31	(+0.3)

Corrections in parentheses ( ) are estimated for days when bar checks were not taken.

USC&GSS FAIRWEATHER

MSS 20

CAPT. John B. Watkins, Jr. Commanding

ECHO CORRECTIONS
Glacier Bay-1970

Launch FA-6 Sheet Number	Date	Correction (fms)
FA-20-3-70	6-09	+0.1
	6-10	+0.2
	6-11	+0.2
FA-20-4-70	6-20	(+0.2)
	6-21	+0.2
	7-30	+0.2
	8-07	(+0.2)
FA-20-6-70	8-06	(+0.2)
FA-10-7-70	7-21	+0.3
	7-22	+0.2
	7-23	+0.2
	7-24	(+0.2)
	7-27	+0.2
	7-28	(+0.2)
	7-29	(+0.2)
	8-03	(+0.2)
FA-10-8-70	7-30	+0.2
	7-31	+0.2
	8-02	+0.2
	8-03	(+0.2)

Corrections in parentheses ( ) are estimated for days when bar checks were not taken.

USC&GSS FAIRWEATHER

MSS 20

CAPT. John B. Watkins, Jr. Commanding

INITIAL CORRECTIONS
Glacier Bay - 1970

Sheet Number	Positions	Corrections (fms)
FA-20-3-70	0049-0080	+0.4 (on F scale)
	2037-2048	+0.1
	2073-2085	+0.1
	2090-2105	+0.1
	8028-8064	+0.1
	8177-8179	-0.1
	8193-8205	+0.1
	8213-8215	-0.1
	8248-8255	+0.1
FA-20-4-70	8001-8021	-0.2
	8083-8134	-0.1
FA-20-5-70	None	
FA-20-6-70	8005-8017	+0.1
	8034-8039	-0.1
	8064-8075	-0.1
	8092-8097 (1350)	-0.1
	8128-8142	-0.1
FA-10-7-70	8001-8171	+0.1
	8209-8230	+0.1
	8269-8274	+0.1
	8302-8318	+0.1
	8319-8328	+0.3
	8329-8338	+0.4
	8339-8351	+0.5
	8352-8361	+0.4
	8362-8370	+0.2
	8371-8378	+0.1

VISUAL HYDRO SIGNAL LIST

H-9139

FA-20-4-70

Name used in Hydrographic Survey	Latitude (° ' m)	Longitude (° ' m)	Origin of Station
003	58 50 1400	136 29 0544	Topo. n.m.n.d.
006	58 47 1654	136 29 0415	△ CINCO 1966
007	58 49 0388	136 25 0513	△ NEVA 1944
012	58 48 1241	136 28 0287	Topo. n.m.n.d.
013	58 45 1215	136 26 0093	" "
101	58 45 0040	136 10 0438	△ TLINGIT RM-1 1939
102	58 43 0634	136 17 0573	△ LONE 1939 reference sta.
103	58 41 1179	136 18 0595	△ GEIKIE 1939
104	58 46 1452	136 19 0220	Topo. n.m.n.d. hydro sta.
105	58 45 0354	136 14 0918	" "
107	58 43 0741	136 03 0429	△ SLEEPY 1970
108	58 45 0805	136 08 0918	△ SOG 1970
109	58 47 0931	136 04 0573	△ SNOWWHITE 1970
301	58 44 0124	136 26 0444	T-12775
302	58 44 0633	136 29 0289	△ SIX 1966
331	58 41 1626	136 21 0681	T-12776
332	58 43 0736	136 24 0188	"
400	58 46 1475	136 30 0263	Topo. n.m.n.d.
401	58 47 0485	136 30 0018	" "
402	58 47 1005	136 29 0422	" "
403	58 47 0037	136 28 0672	" "
404	58 46 1142	136 28 0746	" "
405	58 46 0966	136 29 0766	" "
406	58 44 1539	136 29 0124	" "

Signal List (Continued)
H-9139 (FA-20-4-70)

Name used in Survey	Latitude (° ' m)	Longitude (° ' m)	Origin of Station
407	58 45 0917	136 28 0332	Topo. n.m.n.d.
408	58 45 1497	136 27 0446	" "
409	58 45 1010	136 26 0252	" "
751	58 45 0087	136 12 0754	T-12771
752	58 45 0600	136 11 0326	"
753	58 45 0013	136 09 0354	"
931	58 49 1495	136 24 0005	T-12760
932	58 49 1230	136 22 0740	"
933	58 49 1183	136 21 0264	"
934	58 49 1447	136 19 0186	"
935	58 49 1392	136 17 0842	"
936	58 49 1038	136 16 0677	"
937	58 49 0665	136 16 0702	"
938	58 49 0657	136 18 0210	"
939	58 49 0499	136 20 0151	" Hydro Sta.
940	58 49 0617	136 22 0391	"
941	58 49 0750	136 23 0829	"

TRANSMITTAL SHEET

H-9139 FA-20-4-70

The field work and examination of records was accomplished under the supervision of this command. The boatsheet was inspected daily for completeness and no additional work is considered necessary.

John B. Watkins, Jr.
CAPTAIN, USESSA
Commanding Officer
USC&GSS FAIRWEATHER

H

~~HYPO II AND III PARAMETER CARDS~~

Field No. APE 460 B
Date 2/20/70

1.0498687C1

PARAMETER CARD II

Semi major axis of the earth	6,378,206.4	RDA
X Constant - Distance from central meridian to origin of plotter SP 5	meters	XXN
Y Constant - Distance from equator to origin of plotter SP 2/1	meters	YXN
Central Meridian of Projection	136 21 0000	CMR
Plotter Scale/Survey Scale	10498.6876 1: 20000	SCA
North/south axis of sheet - to correspond to (Y axis - 0) (X axis - 1) of plotter		NYX
Feet/Fathom indicator	0 - feet 1 - fathom	FOF
H Identification No.		JN
		YR

1	2	3	4	5	6	7	8	9	10
6	3	7	8	2	6	6	4	0	7
11	12	13	14	15	16	17	18	19	20
1	3	3	3	7	7	0	0	0	5
21	22	23	24	25	26	27	28	29	30
6	5	0	8	1	1	3	7	0	7
31	32	33	34	35	36	37	38	39	40
4	9	0	8	6	0	0	0	0	6
41	42	43	44	45	46	47	48	49	50
5	2	4	9	3	4	3	8	0	0
									51
									0
									52
									1
					53	54	55	56	57
					2	0	1	3	0
								58	59
								7	0

FOF - 1

PARAMETER CARD III

Lowest Lat. Intersection	58 42 0000	YST
Lowest Long. Intersection	136 07 0000	XST
Difference between Grid	01 0000	DXY
Interval (Long)		XSN
Interval (Lat)		YSN

1	2	3	4	5	6	7	8	9	10
2	1	1	3	2	0	0	0	0	6
11	12	13	14	15	16	17	18	19	20
4	9	0	0	2	0	0	0	0	6
21	22	23	24	25	26	27	28	29	30
6	0	0	0	0	0	0	0	0	2
								31	32
								2	7
								33	34
								0	9

Computed
Punched
Checked
Date 2-20-70

FORM # 1 FIG. 15

PARAMETERS FOR DIGITAL COMPUTING
POLYCONIC PROJECTION

JOHN B. WATKINS, JR.
CAPTAIN, USESSA
COMDG., SHIP FAIRWEATHER

(1) PROJECT No. OPR-460
(2) H No.
(3) FIELD No. B
(4) REQUESTED BY
(5) SHIP OR OFFICE FAIRWEATHER
(6) DATE REQUIRED
(7) VISUAL ☑
(8) ELECTRONIC ☐ (FILL OUT FORM #3)

(10) XKN (SP 5) DISTANCE FROM CMER TO EAST EDGE (NYX = 1) OR WEST EDGE (NYX = 0). 13,337.7 METERS

(11) YKN (SP 241) DISTANCE FROM EQUATOR TO SOUTH EDGE OF SHEET. 6,508,113.670 METERS

20130

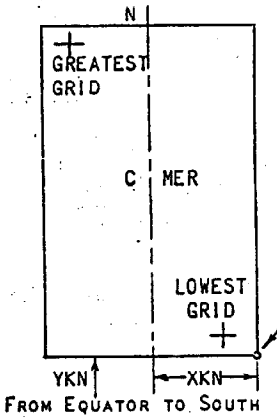
(12) CENTRAL MERIDIAN 136 ° 21 ' 00 "

(13) SURVEY SCALE 1:20,000

(14) SIZE OF SHEET (CHECK ONE) 36x54 ☑ 42x60 ☐ OTHER ☐

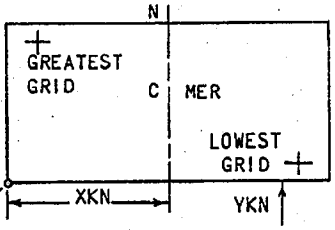
(15) NYX, ORIENTATION OF SHEET (CHECK ONE)

NYX = 1 ☐



FROM EQUATOR TO SOUTH EDGE OF SHEET

NYX = 0 ☑



FROM EQUATOR TO SOUTH EDGE OF SHEET

(9) PLOTTER ORIGIN (CORNER OF SHEET)

LATITUDE 58 ° 41 ' 30 "
LONGITUDE 136 ° 34 ' 48 "

LIST G.P. OF ALL STATIONS TO BE PLOTTED ON THIS PROJECTION ON THE BACK OF THIS FORM. (DEG., MIN., SEC.)

GRID LIMITS

(16) GREATEST LATITUDE 58 ° 51 ' 00 "
(17) LOWEST LATITUDE 58 ° 42 ' 00 "
(18) DIFFERENCE ° 09 ' 00 "

(PROJECTION LINE INTERVAL, PAGE 4 HYDRO MANUAL)

(19) 01 ' 00 "
(20) 9 YSN

(21) GREATEST LONGITUDE 136 ° 34 ' 00 "
(22) LOWEST LONGITUDE 136 ° 08 ' 00 "
(23) DIFFERENCE ° 26 ' 00 "

(24) 01 ' 00 "
(25) 26 XSN

EJH

APPROVAL SHEET

The smooth sheet has been inspected, is complete, and meets the requirements of the General Instructions for automated surveys and the Hydrographic Manual. (Note: All exceptions are listed in the Verifier's Report.)

Examined and approved,

William M. Martin
Supervisory Carto. Tech.
5/4/72

Approved and Forwarded,

Walter L. Bradly, CDR, NOAA
Chief, Processing Division
Pacific Marine Center

TIDE NOTE FOR OPR-460, GLACIER BAY, ALASKA, 1970

Three tide gages were installed and operated during the survey. These were at Bartlett Cove, Composite Island, and on the south shore near the mouth of Geikie Inlet. Hourly heights were scaled and data-logged by ship's personnel and forwarded to PMC for processing. Marigrams were forwarded to Chief, Tides Section (C3312), Rockville, for determination of the datum, time and height relationships, and the recommended zoning. This information is to be furnished the PMC Processing Division by Chief, Tides Section.

FORM C&GS-712
(3-9-64)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

December 16, 1970

~~Marine Center~~: Pacific Marine Center

Plane of reference approved ~~as~~ for tide tape printout

HYDROGRAPHIC SHEET 9138 to 9143

Locality: Glacier Bay, Alaska

~~Chief of Party~~: Year 1970

Plane of reference is mean lower low water

Tide Station Used (Form C&GS-681):

Composite Island
Geike Inlet

Height of Mean High Water above Plane of Reference is as follows:

Composite Island	15.7 ft.
Geike Inlet	15.5 "

Remarks

J. M. Symons
Chief, Tides and Currents Branch

USCOMM-DC 6680-P64

FORM 197
(3-16-55)

GEOGRAPHIC NAMES

Survey No. H-9139

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		
Glacier Bay										1
Hugh Miller Inlet										2
Lone Island										3
Sebree Island										4
Tidal Inlet										5
Tlingit Point										6
HUGH MILLER RKS	CSH									7
BLUE MOUSE COVE	CSH 3-21-75									8
GILBERT PENINSULA	CSH 4-2-75									9
										10
										11
										12
										13
										14
										15
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PREPARED BY

Frank W. Probert

CARTOGRAPHIC TECHNICIAN

APPROVED BY

A. Joseph Wright

CHIEF GEOGRAPHER

FORM C&GS-946
(REV. 3-1-64)
(PRESC. BY HYDROGRAPHIC MANUAL 20-2, 6-94, 7-13)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
NAUTICAL CHART DIVISION

HYDROGRAPHIC SURVEY STATISTICS

HYDROGRAPHIC SURVEY NO. H-9139

RECORDS ACCOMPANYING SURVEY: To be completed when survey is registered.

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET & PNO	1	BOAT SHEETS	1
DESCRIPTIVE REPORT	1	OVERLAYS	[redacted] 4

DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES			[redacted]			
CAHIERS	1					
VOLUMES	7					
BOXES			2			

T-SHEET PRINTS *(List)*
T-12760

SPECIAL REPORTS *(List)*

OFFICE PROCESSING ACTIVITIES

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

PROCESSING ACTIVITY	AMOUNTS			
	PRE-VERIFICATION	VERIFICATION	REVIEW	TOTALS
POSITIONS ON SHEET				
POSITIONS CHECKED		2357	100	
POSITIONS REVISED		151	5	
DEPTH SOUNDINGS REVISED		216	20	
DEPTH SOUNDINGS ERRONEOUSLY SPACED		46	0	
SIGNALS ERRONEOUSLY ~~PLOTTED~~ OR TRANSFERRED		1	8	
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS		16	24	
JUNCTIONS		14	30	
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		169	12	
SPECIAL ADJUSTMENTS		0	0	
ALL OTHER WORK		~~173~~ 197	64	
TOTALS		~~372~~ 396	130	

	BEGINNING DATE	ENDING DATE
PRE-VERIFICATION BY		
VERIFICATION BY Matthew J. Sanders	28 July, 1971	28 April, 1972
REVIEW BY Mark J. Friese	6 March, 1975	7 April, 1975

Insp. H. Myers 12hrs 8/29/75 Carstens 8hrs, 9/25/75

USCOMM-DC 6641-P64

Reg. No. _____

The Computer and Excess Sounding Cards for this survey have not been corrected to reflect the changes made to the Computer Card and Excess Card Printouts at this time of the review.

When the cards have been updated to reflect the final results of the survey the following shall be completed:

CARDS CORRECTED

DATE_____ TIME REQ'D_____ INITIALS_____

REMARKS:

Reg. No. _____

The magnetic tape containing the data for this survey has not been corrected to reflect the changes made during evaluation and review.

When the magnetic tape has been updated to reflect the final results of the survey, the following shall be completed:

MAGNETIC TAPE CORRECTED

DATE_____ TIME REQ'D._____ INITIALS_____

REMARKS:

H-9139

Items for Future Presurvey Review

No prior hydrographic coverage exists within the limits of the present survey.

Position Index		Bottom Change	Use	Resurvey
Lat.	Long.	Index	Index	Cycle
584	1361	1	0	50 years
584	1362	1	0	50 years
584	1363	1	0	50 years

OFFICE OF MARINE SURVEYS AND MAPS

MARINE CHART DIVISION

HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-9139 FIELD NO. FA-20-4-70

Alaska, Glacier Bay, Tlinget Point to Tidal Inlet

SURVEYED: June 16 through August 7, 1970

SCALE: 1:20,000
1:10,000 inset

PROJECT NO.: OPR-460

SOUNDINGS: Raytheon DE-723 and Ross 400A Depth Recorders, Leadline and Pole Soundings

CONTROL: Sextant Fixes. on Shore Signals

Chief of Party	J. B. Watkins, Jr.
Surveyed by	J. C. Bishop
	A. F. Divis
	B. L. Keck
	J. J. Lenart
	M. R. Mulhern
	W. D. Neff
	J. E. Thomasson
Protracted by	Ship's Personnel
Automated Plot by	Gerber Digital Plotter (PMC)
Verified and Inked by	M. G. Sanders
Reviewed by	M. J. Friese
	Date: April 7, 1975
Inspected by	G. K. Myers

1. Description of the Area

This survey covers an area in Glacier Bay, including Tidal Inlet on the north to Lone Island on the south.

Glacier Bay is a deep glaciated fjord with steep slopes inshore. Maximum depths of 236 fathoms are found in the deepest portions of the survey. The offshore bottom is irregular and some submerged rocky reefs and random shoals are located within the 100-fathom depth curve. Intermittent ledges and rocks are located along the boulder-strewn shores.

The predominant bottom characteristics are mud, sand, shells, gravel, stones, and boulders.

2. Shoreline and Control

The source of control is adequately stated in Part F of the Descriptive Report.

The shoreline originates with unreviewed advance manuscripts T-12759 (1964-70), T-12760 (1964-70), T-12768 (1964-70), T-12769 (1964-70), T-12770 (1964-70), T-12771 (1964-70), T-12775 (1964-70), and T-12776 (1964-70). In addition, incomplete manuscript T-12761 and planetable sheet T-6754 (1940) were also applied. The foreshore characteristic shown as rocky on the advance and incomplete manuscripts was described more appropriately as boulders and cobbles as stones.

3. Hydrography

A. Depths at sounding line crossings are in good agreement.

B. The usual depth curves were adequately delineated except in some areas along steep slopes in close proximity to the shore. Dashed curves were added to better emphasize lesser depths in areas of deeper soundings.

4. Condition of the Survey

The survey records, automated plotting, and the Descriptive Report are adequate and conform to the requirements of the Hydrographic Manual supplemented by the Instruction Manual-Automated Hydrographic Surveys.

In addition to the DE-723 depth recorder, a prototype Ross 400A depth recorder and digital display system was used. Depths recorded by these instruments were found in good agreement. Some differences between the depths determined by the digital depth unit and the analog trace of the Ross depth recorder were not considered by the verifier in areas of steep slopes.

5. Junctions

An adequate junction was effected with contemporary surveys H-9138 (1970) on the northwest, H-9142 (1970) and H-9143 (1970) on the west, and H-8817 (1964) on the south. (Junctions) were also effected with H-6575 (1940) and H-6576 (1940) on the east.

Superseded by H-9405(1973)

6. Comparison with Prior Surveys

No prior surveys fall within the common area of the present survey.

7. Comparison with Chart 8202 (latest print date November 3, 1973)

A. Hydrography

The charted hydrography originates with the boat sheet (Bp. 79117) and the verified smooth sheet of the present survey. Charted depths are generally within one fathom of those depths on the present survey.

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

B. Aids to Navigation

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

8. Compliance with Project Instructions

This survey adequately complies with the project instructions.

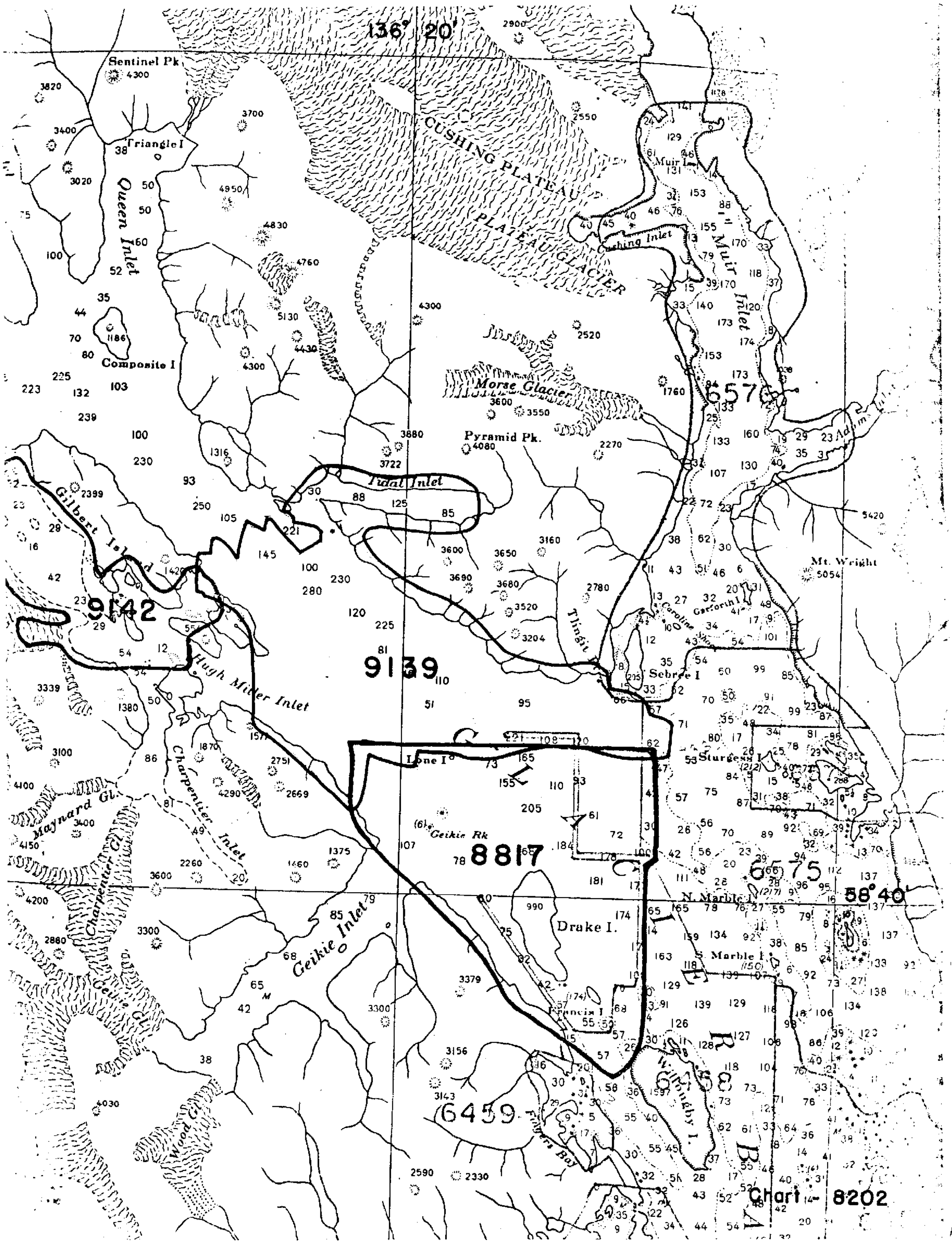
9. Additional Field Work

This is a very good basic survey and no additional hydrography is recommended.

Examined and Approved:

R A Houlton
Chief
Marine Chart Division

Robert C Munson
Associate Director
Office of Marine Surveys and Maps


136° 20'
Sentinel Pk
Triangle I
Queen Inlet
Composite I
CUSHING PLATEAU
PLATEAU GLACIER
Cushing Inlet
Muir I
Muir Inlet
Morse Glacier
Pyramid Pk.
Adams Inlet
Tidal Inlet
Gilbert Island
Hugh Miller Inlet
Mt. Wright
Garforth I
Caroline
Sebree I
Sturgess I
Lone I
Geikie Rk
Drake I.
Francis I.
N. Marble I
S. Marble I
58°40'
Maynard Gl.
Charpentier Inlet
Charpentier Gl.
Geikie Inlet
Geikie Gl.
Wood Gl.
Fingers Bay
Willoughby I.
9142
9139
8817
6570
6575
6468
6459
Chart - 8202

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-9139

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.
1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
8202	6/19/75	James Graham	~~Full Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 20 App'd misc critical corrections only after verification
8202	7/14/75	C.S. Forbes	~~Full~~ Part ~~Before~~ After Verification Review Inspection Signed Via
			Drawing No. ~~Revised hydro throughout area~~ App'd reviewer's report only. Revise hydro & add
			~~Full Part Before After Verification Review Inspection Signed Via~~
			~~Drawing~~ No. 100 fm. curve to next edition of chart.
8202	12/4/75	D.J. Kennon	~~Full~~ Part ~~Before~~ After Verification Review Inspection Signed Via
			Drawing No. Exam'd after inspection no change reflected.
17318 & 17319-SC	2/10/79	James Graham	(Full) ~~Part Before~~ (After) ~~Verification Review~~ (Inspection) Signed Via
			Drawing No. #1 & 1M Fully appd hydro after final inspection to new chart.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
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			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.

FORM C&GS-8352 SUPERSEDES ALL EDITIONS OF FORM C&GS-975. USCOMM-DC 8558-P68