

# 8546

Diag. Cht. No. 8202-2.

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. BO-10-3-60 Office No. H-8546

### LOCALITY

State Alaska

General locality Taku Inlet

Locality Flat Point to Taku Point

19 60

CHIEF OF PARTY

H. G. Conerly

LIBRARY & ARCHIVES

DATE 3-31-61

USCOMM-DC 37022-P66

# 8546

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-8546

Field No. BQ-10-3-60

State Alaska

General locality ~~Southeast Alaska~~ Taku Inlet

Locality ~~Taku Inlet~~ Flat Point to Taku Point

Scale 1:10,000 Date of survey 24-29 September 1960

Instructions dated 17 June 1959, 23 June 1959 and 7 December 1959

Vessel USC&GSS BOWIE

Chief of party H. G. Conerly

Surveyed by A. R. Benton, Jr., A.C. Korn, J.W. Kinney, Jr.

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

Fathograms scaled by Ships Personnel

Fathograms checked by ~~XXXXXXXXXX~~ H. G. Conerly

Protracted by J. W. Kinney, Jr.

Soundings penciled by J. W. Kinney, Jr.

Soundings in fathoms 11ft at MLLW and are true depths

REMARKS:

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DESCRIPTIVE REPORT

To Accompany

Hydrographic Survey No. H-8546 (BO-10-3-60)

Taku Inlet, Alaska

Scale: 1:10,000

Date: 1960

USCGS SHIP BOWIE

H. G. Conerly, Commanding

A. PROJECT:

This survey was accomplished under Instructions for Special Project 10-59 dated 17 June 1959, Amended Instructions dated 23 June 1959 and Supplemental Instructions dated 7 December 1959 issued by the Director. ✓

The purpose of this survey was to accomplish hydrography in areas of Taku Inlet where shoaling has occurred. ✓

B. SURVEY LIMITS AND DATES:

The southerly limit is  $58^{\circ} - 19.5'$  N and the northerly limit is a line drawn true west from signal DYE at approximately  $58^{\circ} - 24.5'$  N, in Upper Taku Inlet. ✓

A Blue-line prints of H-8032 <sup>(1952)</sup> and ~~H-8033~~ <sup>(1952)</sup> were used as boat sheets and the survey is contained within their limits. ✓

Hydrography was begun 24 September 1960 and completed on 29 September 1960. ✓

C. VESSEL AND EQUIPMENT:

All hydrography was done with Launch No. 184, a 26 foot plastic, diesel powered launch which operated from the BOWIE. ✓

Soundings were taken with 808 depth recorders 57-25 and 57-28. ✓

Depths varied from - 1.3 fathoms to  $10\frac{3}{4}$  fathoms. ✓

D. TIDE AND CURRENT STATIONS:

A portable tide gage was installed on the southeast corner of the dock at the Annex Creek Power House  $71^{\circ} 13' 40'' - 05.8'$  W and  $58^{\circ} - 19.07'$  N. (This is outside the limits of the sheet.) ✓

A pressure tide gage was installed on the same dock and its results were used also in reducing soundings. See Tidal Note attached to this report. ✓

There were no current stations within the limits of the sheet or in the project. ✓

E. SMOOTH SHEETS:

The smooth sheet projection was constructed by personnel of the Seattle Processing Office, and plotted by personnel of the Ship BOWIE. ✓

F. CONTROL STATIONS:

Second and third order triangulation stations used for control on this sheet were established in 1893, 1929 and 1937. ✓

Topographic signals used for control were established in 1893, 1929, 1937 and 1952. ✓

Hydrographic signals were located by sextant angles. One cut was taken from signal DUKE to signal JOE. Signal JOE was a bare pole dressed with signal cloth by personnel from the Ship BOWIE. This cut passed through a signal on the blue line print of sheet H-8032 used as a boat sheet for this project and it was assumed that the pole was the remains of the signal appearing on sheet H-8032. This signal was then named JOE for this project (CS-10-59). ✓

G. SHORELINE AND TOPOGRAPHY:

Shoreline for the smooth sheet comes from blue-line tracings No. RS-705 and No. RS-706<sup>(1959)</sup>. ✓

H. SOUNDINGS:

Soundings were taken with 808 depth recorders 57-25 and 57-28. ✓

I. CONTROL OF HYDROGRAPHY:

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

J. ADEQUACY OF SURVEY:

This survey is adequate and complete and should supersede previous surveys of this area. ✓

K. CROSSLINES:

An adequate number of crosslines were run and crossings were satisfactory. ✓

L. COMPARISON WITH PRIOR SURVEYS:

The previous survey of this area was made in 1952 at the same scale (1:10,000). Sounding lines on part of the 1952 sheet (H-8032) are more closely spaced, and extend further east and north than on H-8546. ✓

East of  $134^{\circ} - 01.5'W$  there has been shoaling from 1 to 10 fms. Shoaling of 10 fms. is approximately 0.3 n.m. west of signal STOW. North of  $58^{\circ} - 24.5'N$  shoaling has also been extreme. Sounding lines were ended at approximately that latitude because the evidence of shoaling was so great that there did not appear to be a navigable channel beyond that point. ✓

The channel today is much narrower than in 1952 and very close to the west side of the Inlet between  $58^{\circ} - 20'N$  and  $58^{\circ} - 22'N$ . To enter the channel without grounding in the foul ground south of Flat Point a vessel must come at Flat Point keeping the glacier in view. No 10 fathom soundings were found north of  $58^{\circ} - 21'N$  in the channel and no 5 fathom soundings north of  $58^{\circ} - 22'N$ . North of LET, 1893-1929 the channel heads NNE (approximately  $015^{\circ}T$ ), becomes very narrow and very soon 3 fathoms or less. Passage north of  $58^{\circ} - 22'N$  should not be attempted without local knowledge. ✓

The cross-line, fixes 149c to 152c, is plotted using MUG as the right object for fixes 151 and 152c. This puts the line north of where it would be using LIP as the right object and it seems to fit better plotted that way. ✓

M. COMPARISON WITH CHART:

Chart 8235, revised 7/20/59. Hydrography was completed to a line running true west from Taku Point. ✓

The depth curves shown westerly of Davidson Point have changed completely. The 5 fm. curve has moved out to the <sup>position of the former</sup> 6 fm. curve at  $58^{\circ} - 20'N$  and as far as the <sup>former position of the</sup> 10 fm. curve at  $58^{\circ} - 22'N$ . The 0, 1, 2 and 3 fm. curves have moved out correspondingly. ✓

A channel of any size and depth does not extend far beyond where shown on the chart. The deepest water is still about as charted. ✓

The limits of hydrography do not extend as far east as the boulders charted south of Taku Point. The only <sup>exception is a</sup> crossline was run thru a gap between boulders. They were not sighted and no attempt was made to locate them. ✓

Extreme shoaling has taken place in the area north of a line running true east from Flat Point so a completely revised chart of this area is necessary. ✓

The rocks awash\* charted just south of Flat Point were not searched for and they were not seen while doing hydrography. The rock awash between signals JOE and FUB was not searched for and was not seen. ✓

\* Rocks shown on manuscript as 'Awash at MHW'. Because hydrographer could not see rocks while running adjacent line of hydro at about  $\frac{1}{3}$  tide. Note 'Awash MHW' deleted from smooth sheet.

N. DANGERS AND SHOALS:

Dangers: The entire area north of aline running due east from Flat Point is shoal, much shoaler than shown on the latest addition of Chart 8235 and dangerous to navigate without local knowledge. ✓

O. COAST PILOT:

See letter, subject, "Corrections to COAST PILOT, S.E. ALASKA 10th. (1952) Edition" for Taku Inlet, Alaska. ✓

P. AIDS TO NAVIGATION:

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

Q. LANDMARKS:

There are no changes or additions that should be charted. ✓

R. GEOGRAPHIC NAMES:

No changes recommended and no new names added. ✓

S. SILTED AREAS:

While fathograms show no evidence of silting, comparison with H-8032 indicates the entire bottom has shoaled from 1 to 12 fathoms in the eight years since survey H-8032 was made. ✓

Z. TABULATION OF APPLICABLE DATA:

The following applicable data are attached to this report:

1. Tidal Note Sheet
2. Tide Reducers ✓
3. Abstract of Bar Check Corrections
4. List of Hydrographic Signals
5. Table of Statistics
6. Letter, Subject - Coast Pilot, Taku Inlet, Alaska

*Jack W. Kinney, Jr.*  
Jack W. Kinney, Jr.  
ENSIGN, C&GS

Approved and forwarded:

*Francis X. Popper*  
Francis X. Popper  
CDR, C&GS  
Commanding Ship BOWIE

TABLE OF STATISTICS

BO-10-3-60

H-8546

<u>DAY</u>	<u>NUMBER OF POSITIONS</u>	<u>MILES SOUNDING LINE</u>	<u>MILES TO &amp; FROM AND MISCELLANEOUS</u>	<u>TOTAL</u>
a	141	20.2	5.5	25.7
b	68	9.7	7.9	17.6
c	223	38.2	5.6	43.8
d	146	20.3	3.5	23.8
e	138	19.4	5.1	24.5
f	15	1.2	2.2	3.4
	<hr/>	<hr/>	<hr/>	<hr/>
	731	109.0	29.8	138.8

LIST OF HYDROGRAPHIC SIGNALS

BO-10-3-60

H-8546

<u>NAME</u>	<u>SOURCE</u>
BLUFF	BLUFF, 1929
CANE	Hydro cuts, Vol. 1 BO-10-2-60 page 56, hydro cuts, Vol. 2 BO-10-2-60.
CROSS	LET, 1893, 1929; Reference CROSS
DEDO	Hydro cuts, Vol. 1 BO-10-2-60 page 56, hydro cuts Vol. 2 BO-10-2-60 page 38
DUKE	DUKE, 1929
DYE	DYE, 1937 (Topo Station)
Fish	Hydro cuts, Vol. 3 BO-10-2-60 page 16
FLAT	FLAT, 1929
FUB	FUB, 1893, 1929
High	HIGH, 1952 (Topo Station)
Joe	Hydro cut, Vol. 2 BO-10-2-60 page 38. Scaled from Boat Sheets BO-10-2-60 and BO-10-3-60 which are blue-line prints of H-8032 and H-8033.
LIP	LIP, 1893, 1929 (Landmark, white "X" constructed of 8" boards 6' long).
MID	Topographic location, BO-10-3-60 Vol. 1 page 3
MIST	Hydro cuts Vol. 1 BO-10-2-60 page 56 " " " 2 BO-10-2-60 page 38
MUG	Hydro cuts, Vol. 3 BO-10-2-60 page 16
NUT	Scaled from Sheet H-8545. Location on H-8545 is from hydro cuts BO-10-2-60 Vol. 1 page 51-53.
OOZE	OOZE, 1937
Popi	Hydro cuts Vol. 2 BO-10-2-60 page 38
STOW	STOW, 1937 (Topo Station)(Landmark-white monument, marble 4 ft. high) BO-10-3-60



TIDAL NOTE SHEET

Field No. BO-10-3-60

Registry No. H-8546

Tide reducers for the whole sheet were taken from observations at Annex Creek, Taku Inlet. No time or height corrections were made for distance from the tide gage.

Position of Gage: Lat. 58 - 18.8  
Long. 134 - 06.2

MLLW reading on staff 3.0 feet.

ABSTRACT OF BAR CHECK CORRECTIONS

Project 10-59

Taku Inlet

Date	Corrections								
	<u>2 fms.</u>	<u>3 fms.</u>	<u>4 fms.</u>	<u>5 fms.</u>	<u>6 fms.</u>	<u>7 fms.</u>	<u>8 fms.</u>	<u>9 fms.</u>	<u>10 fms.</u>
1960									
Sept. 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<del>0.1</del>
Sept. 15	0.0	0.0	-0.1	-0.1	-0.1	-0.1	0.0	-0.1	0.0
	-0.1	0.0	-0.1	0.0	-0.1	-0.1	-0.1	0.0	-0.1
Sept. 16	-0.1	0.0	0.0	0.0	0.0	0.0	-0.2	-0.1	0.0
	0.0	0.0	0.0	-0.1	-0.2	-0.1	0.0	-0.1	0.0
	<del>0.1</del>	<del>0.1</del>	<del>0.1</del>	<del>0.1</del>	0.0	0.0	-0.1	-0.1	-0.1
	0.0	<del>0.1</del>	<del>0.1</del>	0.0	<del>0.1</del>	<del>0.1</del>	0.0	-0.1	-0.1
Sept. 18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sept. 19	-0.1	0.0	0.0	0.0	-0.1	-0.1			
	0.0	0.0	0.0	0.0	-0.1				
Totals	-0.2	<del>0.2</del>	0.0	-0.1	-0.5	-0.3	-0.4		
Mn	-0.02	<del>0.02</del>	0.0	-0.01	-0.04	-0.03	-0.04		

Phase Comparison computed on Page 2 Volume 1, Sheet (Reg. H-8546)  
shows -0.3 fm. correction to "B" Scale.

## TIDE REDUCERS

Field No. BO-10-3-60

ANNEX CREEK 1960

Registry No. H-8546

September 24, 1960 - "a" Day

From	To	Fms. Reducers
0800	0804	- 0.8
0804	0814	- 0.7
0814	0825	- 0.6
0825	0837	- 0.5
0837	0850	- 0.4
0850	0907	- 0.3
0907	0940	- 0.2
0940	1015	- 0.1
1015	1050	- 0.2
1050	1106	- 0.3
1106	1120	- 0.4
1120	1134	- 0.5
1134	1145	- 0.6
1145	1155	- 0.7
1155	1206	- 0.8
1206	1215	- 0.9
1215	1223	- 1.0
1223	1232	- 1.1
1232	1240	- 1.2
40	1247	- 1.3
1247	1256	- 1.4
1256	1305	- 1.5
1305	1315	- 1.6
1315	1324	- 1.7
1324	1334	- 1.8
1334	1343	- 1.9
1343	1353	- 2.0
1353	1403	- 2.1
1403	1413	- 2.2
1413	1424	- 2.3
1424	1436	- 2.4
1436	1452	- 2.5
1452	1507	- 2.6
1507	1535	- 2.7
1535	1650	- 2.8
1650	1710	- 2.7
1710	1726	- 2.6

*copy - 1.2*

September 25, 1960 - "b" Day

From	To	Fms. Reducers
0818	0830	- 0.8
0830	0844	- 0.7
0844	0856	- 0.6
0856	0912	- 0.5
0912	0928	- 0.4
0928	1000	- 0.3
1000	1053	- 0.2
1053	1121	- 0.3
1121	1138	- 0.4
1138	1154	- 0.5
1154	1206	- 0.6
1206	1218	- 0.7
1218	1230	- 0.8
1230	1240	- 0.9
1240	1248	- 1.0
1248	1256	- 1.1
1256	1305	- 1.2
1305	1315	- 1.3
1315	1324	- 1.4
1324	1333	- 1.5
1333	1340	- 1.6
1340	1350	- 1.7
1350	1358	- 1.8
1358	1408	- 1.9
1408	1420	- 2.0
1420	1431	- 2.1
1431	1443	- 2.2
1443	1457	- 2.3
1457	1514	- 2.4
1514	1537	- 2.5
1537	1615	- 2.6
1615	1654	- 2.7

*copy - 1.2*

September 26, 1960 - "c" Day

0800	0809	- 1.6
0809	0822	- 1.5
0822	0839	- 1.4
0833	0846	- 1.3
0846	0857	- 1.2
0857	0910	- 1.1
0910	0922	- 1.0
0922	0934	- 0.9

pt. 26, 1960 - "c" Day (Cont)

From	To	Fms. Reducers
0934	0946	- 0.8
0946	1000	- 0.7
1000	1019	- 0.6
1019	1045	- 0.5
1045	1225	- 0.4
1225	1245	- 0.5
1245	1257	- 0.6
1257	1311	- 0.7
1311	1326	- 0.8
1326	1339	- 0.9
1339	1351	- 1.0
1351	1402	- 1.1
1402	1413	- 1.2
1413	1423	- 1.3
1423	1433	- 1.4
1433	1443	- 1.5
1443	1454	- 1.6
1454	1504	- 1.7
1504	1514	- 1.8
1514	1526	- 1.9
1526	1538	- 2.0
1538	1555	- 2.1
1555	1613	- 2.2
13	1636	- 2.3
1636	1710	- 2.4
1710	1800	- 2.5

*copy - 1022*

September 27, 1960 - "d" Day

1100	1106	- 0.8
1106	1132	- 0.7
1132	1308	- 0.6
1308	1336	- 0.7
1336	1354	- 0.8
1354	1408	- 0.9
1408	1424	- 1.0
1424	1437	- 1.1
1437	1450	- 1.2
1450	1503	- 1.3
1503	1517	- 1.4
1517	1530	- 1.5
1530	1543	- 1.6
1543	1557	- 1.7
1557	1610	- 1.8
1610	1624	- 1.9
1624	1640	- 2.0
1640	1700	- 2.1
1700	1723	- 2.2
1723	1800	- 2.3

*copy - 1022*

September 28, 1960 - "e" Day

From	To	Fms. Reducers
0700	0900	- 1.9
0900	0930	- 1.8
0930	0953	- 1.7
0953	1013	- 1.6
1013	1029	- 1.5
1029	1046	- 1.4
1046	1100	- 1.3
1100	1117	- 1.2
1117	1135	- 1.1
1135	1253	- 1.0
1153	1213	- 0.9
1213	1238	- 0.8
1238	1330	- 0.7

September 29, 1960 - "f" Day

0800	0840	- 1.9
0840	0910	- 2.0

*copy - 1022*

USCAGS SHIP BOWIE  
705 Federal Office Bldg.  
Seattle 4, Washington

18 January 1961

To: The Director  
Coast and Geodetic Survey  
Department of Commerce Bldg.  
Washington 25, D. C.

Subject: Coast Pilot, Taku Inlet, Alaska.

Reference: Coast Pilot for S. W. Alaska, 10th. (1952) Ed.

Page 337, Line 18:

Change semi-colon after ice to a period and delete remainder of line 18 and all of lines 19 and 20.

Page 337, Lines 22 to 25:

After period following the word "bold" delete remainder of lines 22, 23, 24 and 25 and substitute the following: "Thence to about 2 miles south of Taku Point, a distance of approximately 4 miles, the channel is narrowed by a flat extending out from the eastern shore. From two miles south of Taku Point to the vicinity of Taku Point the channel is ill-defined, narrow, subject to change and should not be traversed without local knowledge."

Page 338, Lines 10 - 14:

Delete lines 10, 11, 12, 13 and up to and including "moraine" in line 14 and substitute the following: "Directions - From a point 0.1 miles due east of Flat Point steer 007° to a point 0.1 miles east of the second reference cross (light colored stone cross, grave marker, about 4 feet high) approximately two miles above Flat Point. Beyond there to Taku Point the channel is ill-defined, narrow, subject to change and should not be traversed without local knowledge."

Page 338, Lines 20 - 22:

Delete lines 20 - 22 as the area north of Taku Point is now very shoal.

Page 338, Lines 39 and 40:

Delete sentence - "Considerable shoaling was reported \_\_\_\_."

Francis X. Popper  
CDR, CAGS  
Commanding Ship BOWIE

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coastal Surveys~~

May 11, 1961

Division of Charts: R. H. Carstens

Plane of reference approved in  
3 volumes of sounding records for

HYDROGRAPHIC SHEET 8546

Locality TAKU INLET, ALASKA(S.E.)

Chief of Party: H. G. Conerly (1960)  
Plane of reference is mean lower low water, reading  
3.0 ft. on tide staff at Annex Creek, Taku Inlet  
30.6 ft. below B. M.(1937)

Height of mean high water above plane of reference is: 14.7 ft.

Condition of records satisfactory except as noted below:

Burt W. Wiley  
Chief, Tides & Currents Branch

~~Chief, Division of Tides and Currents~~

GEOGRAPHIC NAMES

Survey No. H-8546

Name on Survey	On Chart No. 8235										K	B&N
	A	B	C	D	E	F	G	H	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	
Davidson Creek	✓										✓	1
Davidson Point	✓											2
Flat Point	✓											3
Scow Cove	✓											4
Taku Inlet	✓											5
Taku Point	✓											6
												7
												8
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												12
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*George W. Bell*  
*Geographic Names*  
*4/18/61*

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8546...

Records accompanying survey: Smooth sheets 1...;  
 boat sheets 1...; sounding vols. 3...; wire drag vols. ....;  
 Descriptive Reports 1...; graphic recorder envelopes 1...;  
 special reports, etc. ....  
 .....

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

Number of positions on sheet		<u>731</u>
Number of positions checked		<u>60</u>
Number of positions revised		<u>1</u>
Number of soundings revised (refers to depth only)		<u>25</u>
Number of soundings erroneously spaced		<u>0</u>
Number of signals erroneously plotted or transferred		<u>0</u>
Topographic details	Time	<u>6</u>
Junctions	Time	<u>1</u>
Verification of soundings from graphic record	Time	<u>32</u>
Special adjustments	Time	<u>1</u>

Verification by Kris Larson Total time 40 Date 3-17-72  
D.R. Engle 2 4-18-72

Reviewed by Bruce Alan Olmstead Time 65 Date 04-06-73

Inspected by D. R. Engle 30 2-25-74



OFFICE OF MARINE SURVEYS AND MAPS

MARINE CHART DIVISION

HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-8546

FIELD NO. BO-10-3-60

Alaska, Taku Inlet, Flat Point to Taku Point

SURVEYED: September 24-29, 1960

SCALE: 1:10,000

PROJECT NO.: SP 10-59

SOUNDINGS: 808 depth recorders

CONTROL: Sextant fixes on shore signals

Chief of Party..... H. G. Conerly  
Surveyed by ..... A. R. Benton, Jr.  
..... A. C. Korn  
..... J. W. Kinney, Jr.  
Protracted by ..... J. W. Kinney, Jr.  
Soundings plotted by ..... J. W. Kinney, Jr.  
Verified and inked by ..... Kriss Larson  
Reviewed by ..... B. A. Olmstead  
Date: April 6, 1973  
Inspected by ..... D. R. Engle

1. Description of the Area

This survey is located in the upper regions of Taku Inlet between Flat Point and Taku Point. The bottom is generally smooth in the southern part of the survey with extensive mud flats sloping gently from the eastern shore to the natural 5 to 10-fathom channel where it rises abruptly to the western shore. The bottom becomes more irregular in the northern part of the survey where the effects of Taku Glacier are more apparent. The channel here is narrow and 1 to 5-fathoms in depth with extensive mud flats extending from both of its sides. No bottom samples were obtained on the present survey. However, the bottom characteristics from prior surveys indicate the bottom to consist of soft mud and sand.

2. Control and Shoreline

The origin of control is given in the Descriptive Report. The shoreline originates with shoreline revision surveys RS-705 and 706 dated 1959.

The rocks awash just south of Flat Point originate with RS-706 (1959) on which they are labeled "awash at MHW". However while running hydrography adjacent to these rocks at about 1/3 tide the hydrographer

noted that he could not see these rocks. Therefore, the rock awash symbols were retained, but the note "awash at MHW" was deleted from the smooth sheet.

### 3. Hydrography

Depths at crossings are in adequate agreement. The depth curves are adequately delineated except the low water line (which was not required by the special project instructions).

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

### 4. Condition of Survey

The field plotting, sounding records and the Descriptive Report are adequate and conform to the requirements of the Hydrographic Manual, except for the following:

- A. The velocity correctors used were averages of bar checks from an earlier survey. Thus, day to day differences in depths are likely due to lack of bar checks while hydrography was being run.
- B. No bottom samples were taken during hydrographic field work.
- C. Sounding volumes were not signed by either the Officer-in-Charge or the Chief of Party to indicate they had been inspected and approved.

### 5. Junctions

An adequate junction was effected with H-8545 (1960) on the south. A prior survey, H-8032 (1952) was considered for junctioning on the east, west and north but was not used due to extensive shoaling in this area.

### 6. Comparison with Prior Surveys

- A. H-2055 (1890) 1:40,000  
     H-6275 (1937) 1:10,000  
     H-6267 (1937) 1:10,000

These prior surveys have been superseded by H-8032 and H-8033 (1952) within the common area and are not further considered in the present review.

- B. H-8032 (1952) 1:10,000  
H-8033 (1952) 1:10,000

A comparison of these prior surveys and the present survey reveals extensive shoaling throughout the area of the present survey. The maximum shoaling has occurred in the northern half of the survey where prior channel depths of 10 to 15 fathoms have shoaled to present depths of 1.3 to 5.0 fathoms and the channel has shifted approximately 200 meters westerly. The 1-2-3, and 5-fathom curves on the eastern side of the Inlet have moved westerly from 400 to 800 meters but those on the western side have remained generally stable.

The extensive shoaling that has taken place in this area is caused by the deposition of silt from both the Taku River and the advance of Taku Glacier immediately northward.

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

7. Comparison with Chart 8235 (13th Ed; August 14, 1971)

A. Hydrography

The charted hydrography originates primarily with the present survey, partially applied from the boat sheet before verification and review, supplemented by prior surveys already discussed. Only minor differences were noted between the charted depths and the present survey depths except the 1½-fathom depth erroneously charted in latitude 58°22.18', long. 134°02.40' from the present survey. This should be revised to 2½ fathoms.

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

B. Aids to Navigation

No aids to navigation are charted in this area.

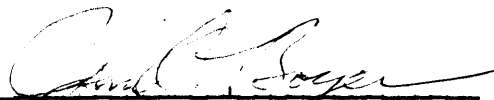
8. Compliance with Instructions

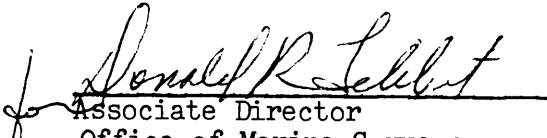
The survey adequately complies with the Project Instructions.

9. Additional Field Work

This is an adequate investigation of the shoaling in this portion of Taku Inlet and is a basic survey of the area covered. No additional hydrography is recommended.

Examined and Approved:

  
 Chief  
 Marine Chart Division

  
 Associate Director  
 Office of Marine Surveys  
 and Maps

H-8545

Information for Future Pre-Survey Reviews

Continual change in the bottom has occurred in upper Taku Inlet since the earliest survey because of the advance of Taku Glacier and the deposition of sediment. The bottom has shoaled throughout the survey area. The channel has become shoaler and narrower and has migrated farther westward with each successive survey. It is anticipated that this trend will continue.

Resurvey Cycle Information

Position Index Lat.	Long.	Bottom Change Index	Use Index	Resurvey Cycle
581	1341	6	1	25 Years
582	1341	6	1	25 Years



