

6584

U. S. COAST & GEODETIC SURVEY
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Form 504 Rev. April 1935 DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Topographic } Hydrographic }	Sheet No. "B"
State S. E. Alaska	
LOCALITY Sumner Strait	
Sumner Strait and approaches to	
Approaches to Affleck Canal	
1937	
CHIEF OF PARTY	
C. C. Jones.	

U. S. GOVERNMENT PRINTING OFFICE

Applied to	Chart	8173	-	11/8/38
"	"	"		8152
"	"	"		8252
"	"	"		8120

11/8/38

2/4/39

2/7/39

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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

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

Field No. "B"

REGISTER NO. T6584

State S. E. Alaska

General locality Sumner Strait

Locality Approaches to Affleck Canal

Scale 1:20,000 Date of survey June, 1937.

Vessel U.S.C. & G.S.S. EXPLORER

Chief of party G. C. Jones

Surveyed by Edwin C. Baum

Inked by Edwin C. Baum

Heights in feet above L.H.W. to ground ~~to tops of trees~~

~~Contour, - Approximate contour,~~ Form line interval 100 feet

Instructions dated July 16, 1937.

Remarks:

DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEET "B - 1937"
T-6584

SUMNER STRAIT

SOUTHEASTERN - ALASKA

1 9 3 7

- o -

G. C. JONES, H. & G. E.,

CHIEF OF PARTY

COMMANDING SHIP EXPLORER

- o -

DESCRIPTIVE REPORT
TO ACCOMPANY TOPOGRAPHIC SHEET "B-1937" T-6584
SOUTHEASTERN - ALASKA.

AUTHORITY:

Survey was executed in accordance with Director's Instructions, dated July 16, 1936. Project H.T. - 211.

LIMITS:

The area of this survey includes Fairway, North and South Islands, as well as the approaches to Affleck Canal. On the eastern entrance to Affleck Canal the topography begins at Point St. Albans and extends northwesterly into Affleck Canal three and three-quarters miles. On the western shore, the topography begins at Cape Decision and extends northerly, including Port McArthur, to a point ~~three~~ ^{seven} and three-quarters miles into Affleck Canal.

GENERAL DESCRIPTION:

Irregular shaped hills of varying heights covered with evergreen trees throughout, are consistent with the general character of the country. The shoreline, in general, is rocky, steep-to, with numerous rocky islets contiguous thereto.

Three small, tree-covered, islands North, South, and Fairway, the tree top elevations of which are given on the topographic sheet, aid materially in identifying the immediate vicinity.

CONTROL:

Triangulation control points executed during the season of 1899, 1923, and 1936, and based on the North American 1927 datum were used.

SURVEY METHODS:

Standard Plane Table survey methods were used. Topographic signals were cut in from triangulation stations on the opposite shore, where possible, and checked by traversing between control points.

No errors were found.

All off-lying features were rodded in.

CONTOURS:

All elevations were determined from the opposite shore, off-

lying rocks and islands. The accepted methods in accordance with Special Publication No. 144, were followed, all elevations are to the ground. Unusual caution was exercised in estimating tree heights, varying up to approximately 150 feet in height.

COMPARISON:

The instructions for Project H.T. - 211 indicated that the survey on Topographic Sheet Register No. 3631 encompassing portions of the present survey was acceptable. Only topographic work found necessary to execute hydrography and to correct any existing discrepancies was required.

The shoreline, islands and rocks on Topographic Sheet Register No. 3631, were transferred in pencil to this sheet prior to field work for guidance in verification. Sufficient disagreement was found to justify further examination. It was determined to initiate a complete survey of the area under consideration as this policy would entail very little additional work. This course was pursued and a thorough investigation showed discrepancies in the delineation of the shoreline and displacement of rocks varying up to 150 meters.

TOPOGRAPHIC SIGNALS:

All topographic signals shown outside of the highwater line are targets attached to stumps, fallen trees, etc., and are not of a permanent nature except whitewashes on rocks and islets identified by proper symbols.

ROCKS AND LOW WATER LINE:

All off-lying rocks and islets were rodded in by the topographer.

The low water line was determined by the topographer.

JUNCTURES:

No juncture of shoreline or contours was possible in vicinity of Cape Decision as no contours were shown on Topographic Sheet Register No. T-3631.

The northern extremity of this survey on each side of Affleck Canal joins Field Sheet No. "C-1937". T-6585

The area to eastward of Point St. Albans joins Field Sheet No. "H - 1937". T-6590

CHANGES OF COAST LINE:

The character of the shoreline, previously described under General Description, is free from erosion. No evidence was found as to recession, growth, subsidence or emergence of shoreline.

STATISTICS:

28 - Statute miles shoreline.

15 - Statute square miles area.

DECLINATOIRE OBSERVATIONS:

Six Declinatoire Observations were determined as follows:

Magnetic Declination	29°30''	WAY-1936 - June 7, 1937, 9:45 A.M.	
"	"	29°30'	HOW-1936 - June 8, 1937, 2:10 P.M.
"	"	29°30'	MARBLE-1936 - June 9, 1937, 9:40 A.M.
"	"	28°45'	ARTHUR-1936 - June 18, 1937, 4:00 P.M.
"	"	29°45'	STAR-1936 - June 22, 1937, 9:07 A.M.
"	"	29°15'	CAPE DECISION LIGHTHOUSE - June 27, 1937, 2:00 P.M.

Time based on 135th Meridian.

PERMANENT TOPOGRAPHIC STATIONS:

Two previously established Topographic Stations at topographic station "Yes" and "Sad" were found. The remainder of those listed were not recovered.

No new additional stations were established due to the large number of triangulation stations present.

BEACON:

Lemon Point Rock Beacon rock located by triangulation is indeterminate in elevation, since a concrete footing for supporting structure precludes this information. *↑ note placed on sheet in office.*

GEOGRAPHIC NAMES / GHE

Chart Name	Local Name	Source from which information was obtained	Recommended Name
Kuiu Island	None	Chart No. 8201	Kuiu Island
North Island	None	Chart No. 8201	North Island
South Island	None	Photostat of Port McArthur 1886 Scale 1:10,000	South Island
Fairway Island	None	Chart No. 8201	Fairway Island
Pt. St. Albans	None	Chart No. 8201	Pt. St. Albans
Affleck Canal	None	Chart No. 8201	Affleck Canal
Cape Decision	Cape Decision	Chart No. 8201	Cape Decision
Port McArthur	Port McArthur	Chart No. 8201	Port McArthur
Lemon Point	None	Photostat of Port McArthur 1886 Scale 1:10,000 and Light List Pacific Coast 1938	Lemon Point

Respectfully submitted,

A handwritten signature in cursive script, reading "Edwin C. Baum".

Edwin C. Baum,
Jr. H. & G. Engr., C. & G. S.,
U.S.C. & G.S.S. EXPLORER.

APPROVED AND FORWARDED:

A handwritten signature in cursive script, reading "G. C. Jones".

G. C. Jones,
Commanding Officer,
U.S.C. & G.S.S. EXPLORER.

Remarks

Decisions

1		USGB decision
2		
3		
4		
5	This feature off Limits of this sheet Location 56-05 see H-1749 & Vancouvers Chart 133-58	Does not belong on this sheet.
6		
7		
8		
9	Pt. Lemon on 8200	
10	For title only	
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GEOGRAPHIC NAMES

Survey No. T-6584

GEOGRAPHIC NAMES											
Survey No. T-6584											
Name on Survey	On Chart No. 8252, 8200										
	A	B	C	D	E	F	G	H	K		
		On previous survey No. T-2355									
		On U. S. quadrangle Maps									
		From local information D.R.									
		On local Maps									
		P. O. Guide or Map									
		Rand McNally Atlas									
		U. S. Light List									
		Bakers Dict.									
✓ <u>Kuiu Island</u>	✓	H-1756								1	
✓ <u>Affleck</u> ^{Canal} Channel	✓ Canal	✓	✓						✓	2	
✓ <u>Port McArthur</u>	✓	✓	✓	✓	✗				✓	3	
✓ <u>North Island</u>	✓	H-1756	✓						✓	4	
✓ <u>Point Saint Albans</u>	✓	H-1749	✓						✓	5	
✓ <u>South Island</u>	8200	H-1756	✓						✓	6	
✓ <u>Fairway Island</u>	✓	✓	✓						✓	7	
✓ <u>Cape Decision</u>	✓	✓	✓	✓	✗					8	
✓ <u>Lemon Point</u>	8200	H-1756							✓	9	
✓ <u>Sumner Strait</u>	✓	✓	✓						✓	10	
✓ <u>Marble</u> ^{Islet} Island	8200	H-1749							✓	11	
✓ <u>Mt. Howard</u>	8200	H-1749							✓	12	
										13	
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Names underlined in red approved											
by <u>GHE</u> on <u>5/24/38</u>											
M 234 <u>✓</u>											

Names underlined in red approved

by GHE on 5/24/38

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
~~PHOTOSTAT OF~~

~~No. 1111~~

No. T-6584

received April 26, 1938
registered May 7, 1938
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			
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90			

RETURN TO

82	T. B. Reed
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✓ *TBR*

Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY NO. 6584 (1937) FIELD NO. B.

Approaches to Affleck Canal, Sumner Strait, S. E. Alaska
Surveyed in June 1937, Scale 1:20,000
Instructions dated July 16, 1936 (EXPLORER)

Plane Table Survey.

Aluminum Mounted.

Chief of Party - G. C. Jones
Surveyed by - Edwin C. Baum
Inked by - Edwin C. Baum

1. Condition of Survey.

The survey is neat and legible and conforms to the requirements of the Topographic Manual.

The Descriptive Report is clear and comprehensive and satisfactorily covers all items of importance.

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project.

3. Junctions with Surveys.

- a. The junctions on the north with T-6585 (1937) and on the northeast with T-6590 (1937) are satisfactory.
- b. No contemporary surveys adjoin the present survey on the south-west and west. T-4159a (1925), however, joins the present survey in the vicinity of CAPE DECISION and lat. $56^{\circ}03.5'$, a holiday of approximately $1\frac{1}{2}$ square miles existing in lat. $56^{\circ}01.5'$, long. $134^{\circ}08.8'$. Agreement of shoreline is fair. Agreement of formlines is very poor particularly in lat. $56^{\circ}03.5'$ where portions of the formlines run at right angles to one another. For charting purposes, arbitrary adjustments will be necessary.

4. Comparison with Prior Surveys.

- a. H-1749 (1886), T-2355 (1886) and T-2641a (1903-04).

H-1749 and T-2355 each contain shoreline and formlines on a scale of 1:80,000 and cover the entire area of the present survey. They are actually one topographic survey but the details are slightly different in many areas and especially in the case of formlines which appear to have been plotted independently.

Because of the small scale and sparseness of details, an adequate comparison cannot be made. It is noted, however, that the present survey bears out the essential features except that differences in positions and delineations of identical features exist.

T-2641a on a scale of 1:100,000 just touches the present survey on the southeastward and contains no information that needs consideration in this review.

The larger scale present survey with its greater detail and more rigid control should supersede these sheets in the common area in future charting.

b. H-1756 (1886), Scale 1:10,000.

This hydrographic sheet is a large scale development of PORT McARTHUR. It contains both shoreline and formlines.

The shoreline features are borne out by the present survey except that differences exist in some details. The point in lat. $56^{\circ}03.2'$, long. $134^{\circ}06.7'$ projects 120 m. off shoreward of the present survey position which is based on a triangulation station. In lat. $56^{\circ}04.7'$, long. $134^{\circ}06.5'$, H-1756 shows extensive detached ledge and islet details which have apparently been generalized because they are not verified by the present survey nor by sounding lines on H-6284 (1937) which were run directly over some of these features..

Agreement of formlines is good in but a few places since differences of as much as 400 m. are noted in identical contours. For example, H-1756 shows a smooth slope in lat. $56^{\circ}04.6'$, long. $134^{\circ}09.0'$ whereas the present survey shows a small pronounced peak.

The present survey with its more rigid control should supersede this survey in the common area in future charting.

c. T-3631 (1916), scale 1:20,000.

This survey covers the southeastern and eastern portion of the present survey. Agreement of shoreline is good in some areas but in others differences of as much as 150 m. are noted. Several offlying rocks were not verified by the present survey nor the accompanying hydrographic sheet, H-6584 (1937). The Descriptive Report, H-6584, page 3 states that the rock awash "P.D." in lat. $56^{\circ}04.7'$, long. $134^{\circ}00.6'$ was disapproved. This Descriptive Report, page 2 further states that the entire shoreline and foul areas were searched at a near zero or minus tide for offlying rocks or reefs. The Descriptive Report of the present survey (page 2) also states that all rocks on T-3631

were transferred in pencil to the present sheet for guidance in verification. From the foregoing it is concluded that the several rocks not verified are non existent and should be disregarded in future charting.

Formlines and elevations shown on the 1916 survey are common to the present survey only in the southeast portion of KUIU ISLAND. The elevations are in agreement as are also the formlines; the latter, however, have apparently been transferred by the topographer and adjusted wherever necessary.

The present survey should supersede this survey in the common area in future charting.

5. Comparison with Charts 8201 (New Print dated April 7, 1938).
8179 (New Print dated Feb. 27, 1935).

- a. Topography.

Topography shown on the charts originate entirely with surveys discussed in previous paragraphs of this review. In this connection, the elevation of 2841 feet on MT. HOWARD in lat. $56^{\circ}06'$, long. $134^{\circ}09'$ is incorrect, the correct value being 2341 feet shown on H-1749 (1886). The delineation on the present survey, however, should be accepted for charting purposes as there is considerable disagreement in this area.

- b. Aids to Navigation.

CAPE DECISION lighthouse agrees closely with its charted position. The beacon off LEMON POINT differs about 65 m. with its charted position. These aids in either position satisfactorily mark the features intended.

The red buoy in lat. $56^{\circ}03.4'$, long. $134^{\circ}07.2'$ is a derelict nun anchored by local fisherman (see Descriptive Report of H-6284, page 3).

6. Field Drafting.

The inking of the shoreline, topographic features and lettering is very good. It is suggested, however, that a mechanical lettering set be used wherever practicable.

7. Additional Field Work Recommended.

No additional field work is required. Mention is made, however, of an inland formline holiday of approximately $1\frac{1}{2}$ square miles which exists between T-4159a (1925) and the present survey in lat. $56^{\circ}01.5'$, long. $134^{\circ}08.8'$.

8. Superseded Prior Surveys.

Within the area covered, the present survey supersedes the following surveys in the common area for charting purposes:

H-1749 (1886) In part, topography only.
H-1756 (1886) entirely, topography only.
T-2355 (1886) in part.
T-2641a (1903-4) in part.
T-3631 (1916) in part.

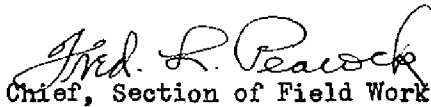
9. Reviewed by Harold W. Murray, December 13, 1938.

Inspected by J. A. McCormick.

Examined and approved:



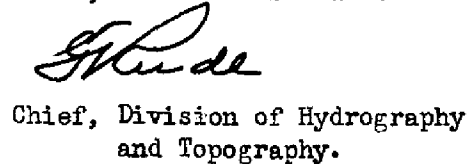
Thos. B. Reed
Chief, Section of Field Records



Chief, Section of Field Work



Chief, Division of Charts



Chief, Division of Hydrography
and Topography.