

6630

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 } Registry No. T-6630
Hydrographic } Sheet No. H-1938

State S.E. Alaska

LOCALITY

Glacier Bay

Berg Bay

1938

CHIEF OF PARTY

H. Arnold Kero

U. S. GOVERNMENT PRINTING OFFICE

6630

applied to drawing of chart 8202 3/7/40 JSL
" " " " 8306 4/11/40 JSL

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. H-1938

REGISTER NO.

State S.E. Alaska

General locality Glacier Bay

Locality Berg Bay

Scale 1:10,000 Date of survey Aug.-Sept., 1938

Vessel M.V. Westdahl

Chief of party H. Arnold Karo

Surveyed by D.H. Konichek

Inked by D.H. Konichek

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

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

Instructions dated March 10, 1938

Remarks: _____

General Information to Accompany All 1938
Topographic Sheets.

Declinatoire and Alidade # 209 was used on all topographic sheets executed in 1938 which includes sheets having field no's, A-38, B-38, C-38, D-38, E-38, F-38, and G-38. Declinatoire #209 was standardized at the Green Lake Magnetic Station at the beginning and at the end of the 1938 field season. The correction was found to be $1^{\circ} 07'$ W. This value depends upon the standardization of compass declinometer # H-19 using a provisional index correction of +5.2 to B declination (see Director's letter 40 - C R S dated Oct. 27, 1938) Standard methods were used for standardization of both the declinometer and the compass declinatoire.

Heights of islands and rocks were obtained as follows: Heights of rocks covered at all stages of the tide were obtained by measuring the depth to which the telemeter rod was covered when held on the rock, and the time noted. Heights of objects bearing at some stages of the tide, but covered at other stages were obtained by estimating the amount bare at the particular time and noting that time. Heights of objects bare at all stages of the tide were obtained by estimating the height above H.W.L.

All estimations of height were made with a direct comparison with the length of the telemeter rod, and where practical these heights were checked by depression or elevation angles taken with the alidade by determining the height of instrument from observations on the water surface at the time the other heights were taken.

Approximate elevations were noted in some instances and were specified to be approximate elevations on the sheets concerned.

Descriptive Report to Accompany Topographic

Sheet No. Registry T-6630 Field H-1938

Glacier Bay - Berg Bay, Alaska

(a) Date of Instructions:

Work was done under instructions from the director
dated March 10, 1938. Project H T -221.

(b) General Description:

The navigable entrance to Berg Bay is rather hard to find, for those not having local information. The land in the vicinity of the entrance is low and heavily wooded, and the aspect of the country changes radically with the stage of the tide due to the reef formations. There is a boulder at approximately Lat. $58^{\circ} 31.6'$ Long. $136^{\circ} 10.2'$, and one at approximately Lat. $58^{\circ} 31.8'$ Long. $136^{\circ} 08.6'$ noted on the sheet with their sizes. These boulders are easily identifiable from just outside the entrance, and could be used as objects on which to take bearings. The general characteristics of the land after entering the Bay are shown more plainly on the sheet than they can be described in this report.

(c) Landmarks:

There are no landmarks in the true sense. The boulders mentioned above would aid a navigator, but could not truly be called landmarks.

(d) Character of Control Used:

Triangulation executed in 1938 was used for control, as described in the 1938 triangulation and season reports.

(e) Closing Errors of Traverses Run:

The control points were numerous enough to eliminate any extensive traverses, and there are no errors in the topography. No. adjustment was necessary.

(f) Description of Auxiliary Survey Methods:

The topographer estimated the heights of cliffs and banks and these approximate heights are noted on the sheet along with the approximate location of each one. It was thought that the information would aid in making a complete chart when the 1:80,000 scale form line sheet now in process of being made is coordinated in the office with the rest of the topography. It has been the habit of the topographer to obtain information which might be classed as: "Additional Data" when the progress of the work would not be hindered by so doing, even though the general requirements of topography would not necessitate so doing. These approximate elevations are shown on the sheet in black ink to avoid possible confusion with positive elevations which are shown in red ink.

The M.L.L.W. line was transferred from the hydrographic sheet in pencil. There seems to be some difference of opinion among the officers here in Seattle as to whether the M.L.L.W. should be transferred from the hydrographic sheet to the topographic sheet at all. But it was decided to pencil the M.L.L.W. line on the topographic sheet so that the survey would present a more comprehensive aspect and would allow erasure in case the M.L.L.W. line shifted due to possible change in tide reducers.

(g) Form Lines:

The instructions did not require form lines on the sheet. A 1:80,000 scale form line sheet is in the process of being made. ✓

(h) Changes in topography:

Sheet No. 2847 dated 1907 on a 1:40,000 scale is a reconnaissance survey of Berg Bay. Comparisons with this work were made in the field as the 1938 work was being done. It was found that the delineation of the H.W.L. on the 1907 work is surprisingly accurate considering the methods used. The inevitable ^{MORE OR LESS MINOR,} disagreements between the 1907 and the 1938 work need not be gone into, as in each case the 1938 work is correct and will take precedent over the old work. ✓

The 1907 Alaska - Canada Boundary Survey map made from photographic reductions on approximately a 1:80,000 scale duplicates the work shown on the 1:40,000 scale sheet No. 2847, so no comparisons were made from it. ✓

(i) Completeness and Reliability:

All topography is complete and reliable except for form lines and elevations which are being done on a form line sheet. ✓

(j) Methods used in Surveying:

The methods used conform to standard surveying practices. ✓

(k) Junctions with previous Work:

This sheet joins a 1:20,000 scale 1938 sheet at the south end and the junction was checked and found to be in agreement. The north limit of the work is very near to triangulation station Spit 1938, and there is little doubt that the 1939 sheets will not conform at the junction on the north. No attempt was made to check the junction on the north with the work executed in 1907 because ^{of} the ✓

scale of the old work and because of the comparative caliber of the 1907 and 1938 topography.

(1) Geographic Names:

The names, "Glacier Bay" and "Berg Bay" are of course well established.

In view of the fact that the islands at the entrance to Berg Bay do not have geographical characteristics which suggest appropriate names it is suggested that the following names be used: "Entrance Island", for the name of the island just south of the main entrance to Berg Bay, and "Berg Island", for the name of the island lying between the south (main entrance) and north entrance to Berg Bay.

It may be desirable to give distinguishing names to different parts of the bay when it comes into more extensive use.

(m) Comparison with Old Surveys:

See section (h) of this report. ✓

(n) Character of Marshes and Low Lying Ground: ✓

The areas indicated on the sheet with the marsh grass symbol which are above high water line are typical marshy places with soft ground. The note on the sheet explains the areas shown with the marsh grass symbol which are below H.W.L.

(o) Statistics:

Sheet Registry No. T-6630

Field No. H-1938

29.9 statute miles of shore line.

Respectfully Submitted,



D.H. Konichek
Aid

Approved and Forwarded



H. & C. Jones
Chief of Party

Remarks

Decisions

1	Referred DCM: do not ink pending decision	585360
2		"
3	Referred DCM: do not ink pending decision	"
4	Netland I proposed for Entrance I. to U.S. L.B.	580355 USCB
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GEOGRAPHIC NAMES

Survey No. **T-6630**

Name on Survey	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
	A,	B,	C,	D	E	F	G	H	K
Nathan I <u>Berg Island</u>		USCB	5/27/42						1
<u>Berg Bay</u>									2
Lars <u>Entrance Island</u>		USCB	5/27/42						3
<u>Glacier Bay</u>									4
									5
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Names underlined in red approved
by L. Heck on 7/5/39

Also 7/9/42

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT

~~PHOTOGRAPHIC~~

~~INDEX~~

No. T -6630

received **Mar. 18, 1939**
registered **June 15, 1939**
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. 6630 (1938) FIELD NO. H

Berg Bay, Glacier Bay, Southeast Alaska
Surveyed in August - September, 1938, Scale 1:10,000
Instructions dated March 10, 1938 (WESTDAHL)

Plane Table Survey

Aluminum Mounted

Chief of Party - H. A. Karo
Surveyed by - D. H. Konichek
Inked by - D. H. Konichek

1. Junctions with Contemporary Surveys

The junction with T-6629 (1938) on the southeast is satisfactory. The survey on the northeast and the 1:80,000 scale form line survey of the general area have not been received from the field.

2. Comparison with Prior Surveys

T-2847 (1907), 1:40,000; T-2852 (1907), 1:80,000

These surveys are identical as to detail and are undoubtedly the same survey shown on different scales. They are considerably generalized but their principal features are in fair agreement with those on the present work. The old surveys should be superseded by the present survey in future charting of the common area.

3. Comparison with Chart 8306 (New Print dated April 13, 1939)

Within the area of the present survey the chart is based entirely on surveys discussed in the preceding paragraph.

4. Condition of Survey

- (a) The descriptive report satisfactorily covers all items of importance.
- (b) The field drafting is satisfactory.
- (c) Penciled low water line transferred in the field from contemporary hydrographic surveys has been left on the sheet.

5. Compliance with Instructions for the Project

Satisfactory.

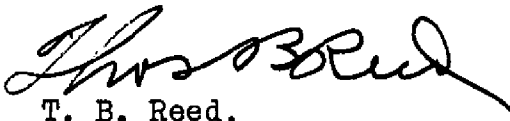
6. Additional Field Work Recommended

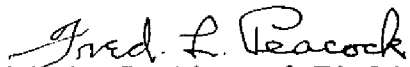
None.

7. Reviewed by - J. A. McCormick, June 22, 1939.


Inspected by - H. R. Edmonston

Examined and approved:


T. B. Reed,
Chief, Section of Field Records


Chief, Section of Field Work


K.T. Adams
Chief, Division of Charts


Chief, Division of H. & T.