### DESCRIPTIVE REPORT

**Type of Survey**: SHORELINE

**Field No.**: __________________________ **Office No.**: T-9818

### LOCALITY

**State**: ALASKA

**General locality**: PRINCE WILLIAM SOUND

**Locality**: TAYLOR GLACIER

---

**1967 - 59**

**CHIEF OF PARTY**

FIELD - H. J. Seaborg

OFFICE - L. W. Swanson

### LIBRARY & ARCHIVES

**DATE** ____________________________
DESCRIPTIVE REPORT - DATA RECORD

I. 9818

Project No. (II): PH-152
Quadrangle Name (IV):

Field Office (II): Ship BOWIE
Chief of Party: H. J. Saaborg

Photogrammetric Office (III): Washington, D.C.
Officer-in-Charge: L. W. Swanson

Instructions dated (II) (III):
Compilation Instructions - Supp. 5 - Prince Wm. Sd. dated 15 Dec. 58
Supp. 6 - " " " 22 July 59

Copy filed in Division of Photogrammetry (IV)
Office Files

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:10,000
Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): 1.0

Date received in Washington Office (IV):
Date reported to Nautical Chart Branch (IV):

Applied to Chart No. Date:
Date registered (IV):

Publication Scale (IV):
Publication date (IV):

Geographic Datum (III): HA, 1927
Vertical Datum (III): MHW
Mean sea level except as follows:
Elevations shown as (H) refer to mean high water
Elevations shown as (L) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III):
Lat.: Long.: Adjusted
Unadjusted

Plane Coordinates (IV): UTM State: Zone:

Y = X =

Roman numerals indicate whether the item is to be entered by (I) Field Party, (III) Photogrammetric Office, or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.
Field Inspection by (II):  W. P. James  
Date:  June 1959

Planetable contouring by (II):  None  
Date:  

Completion Surveys by (II):  None  
Date:  

Mean High Water Location (III) (State date and method of location):  
Field and office identification of shoreline on photograph taken May 1957 and Aug. 1958

Projection and Grids ruled by (IV):  Dempsey  
Date:  Dec. 17, '58

Projection and Grids checked by (IV):  Shoup  
Date:  Jan. '59

Control plotted by (III):  H. Lucas  
J. Battley  
Date:  Jan. '59  Aug. '59

Control checked by (III):  W. Helling  
R. Sugden  
Date:  Sept. '59

Radial Plot or Stereoscopic R. Sugden  
Control extension by (III):  

Stereoscopic Instrument compilation (III):  
Planimetry  
Contours  

Manuscript delineated by (III):  J. Battley T-9817  
R. Sugden T-9818  
Date:  9 - 59

Photogrammetric Office Review by (III):  E. Ramsey  
Date:  22 Oct. 59

Elevations on Manuscript checked by (II) (III):  


Camera (kind or source) (III): C&GS Mine-lens and infrared single-lens

PHOTOGRAPHS (III)

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<th>Date</th>
<th>Time</th>
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Tide (III)

Reference Station: Cordova
Subordinate Station: Wells Passage

Atlantic Marine Center
Washington Office Review by (IV): C. H. Bishop

Final Drafting by (IV):
Drafting verified for reproduction by (IV):
Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III): 9 miles
Shoreline (More than 200 meters to opposite shore) (III): 9 miles
Shoreline (Less than 200 meters to opposite shore) (III):          
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): Recovered: Identified:
Number of BMs searched for (II): Recovered: Identified:
Number of Recoverable Photo Stations established (III):
Number of Temporary Photo Hydro Stations established (III):

Remarks:
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<th>Compilation Record</th>
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<tr>
<td>Preliminary shoreline for hydrography</td>
<td>1957</td>
<td>Superseded</td>
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<tr>
<td>New radial plot, manuscript revised; ADVANCE</td>
<td>Sept 1959</td>
<td></td>
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<tr>
<td>Final Review</td>
<td>August 1970</td>
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SUMMARY TO ACCOMPANY

DESCRIPTIVE REPORT T-9818

Records for this map were not complete at the time of final review, which was several years after compilation. The Compilation Record and notes concerning the absence of reports were inserted by the final reviewer.

This shoreline manuscript, scale 1:10,000, is one of 43 sheets that comprise Project PH-152, which is located in the western part of Prince William Sound. T-9818 covers the central part of Kings Bay.

The original manuscript was preliminary in advance of hydrography. A radial plot was run on a 1:20,000 scale base sheet, using nine-lens photography of 1957. Points thus obtained were transferred to the 1:10,000 scale manuscript and alongshore features were compiled.

Copies of the preliminary manuscript were sent to the field for photo-hydro support. Additional horizontal control was identified on the photographs furnished and field edit was accomplished. A final plot was laid, the manuscript revised, and then classified "Advance."

Final review was done at the Atlantic Marine Center in August 1970.

The compilation manuscript was a vinlylite sheet 3 minutes 45 seconds in latitude by 6 minutes 37.5 seconds in longitude.

A cronaflex copy of the final reviewed manuscript and a negative have been forwarded for record and registry.
FIELD INSPECTION REPORT

MAP 7-9818

PROJECT PH-152

There was no field inspection prior to compilation of this map and no Field Inspection Report is bound with this Descriptive Report.
PHOTOGRAMMETRIC PLOT REPORT
KINGS BAY, ALASKA
Project Ph-152
Aug - 1959

A preliminary plot of this area using mostly office-
identified control was done in Feb., 1959. Ten additional
control stations with CS1 cards and accompanying field
photo identification (June 1959) were furnished to control
a new plot. The original templetts were utilized in laying
this latter plot.

21. Area Covered: This report discusses the final radial plot
for shoreline surveys T-9118, T-9817 thru T-9821 and a por-
tion of T-9122. These surveys cover the area of Kings Bay
from the entrance to the head.

22. Methods - Vinylite sheets, ruled with base grids at 1:20,000
scale to correspond with the UTM grid lines were used to lay
the plot.

Photo coverage of the area included two nine-lens flights
on either side of the bay furnished on positype paper prints
at 1:20,000 scale, and single-lens 58 L series infra-red
photographs at 1:10,000 scale.

The additional field-identified control was transferred
to the nine-lens office prints and added to the original
templetts. Positions of templetts generally remained the same
in the junction area of the north part of the plot which had
former field-identified control. Due to the additional control
some positions on the west side of the bay and in the delta
at the head of the bay shifted about 0.3 mm. Otherwise po-
sitions did not change. The new positions were circled on
the base sheet and replotted on the 1:10,000 scale manu-
scripts where the resultant error would be doubled.

The single lens photographs were resected on the
manuscripts into common pass points with the nine-lens photo-
graphs used in the plot. The positions of their centers
were added for compilation purposes.

23. Adequacy of Control. The additional control resulted in a
tight plot throughout. All control held within 0.3 mm, except
FDM 1946 (sub pt) which was missed 0.5 mm to the southeast
due to an error in identification on the field photo. During photo preparation another similar point fitting the description was noted which would have held in the photo. (see plot sketch for distribution of control).

24. Supplemental Data - None

25. Photography

The infra-red photographs were lacking in detail especially in shadow areas, making it difficult to find common pass points with the nine-lens photographs. The nine-lens photographs although lacking in definition were adequate for the plot.

Photogrammetric Plot Sketch and list of control submitted with report.

Submitted by

Robert L. Sugden
Cartographer

Approved by:

Everett H. Ramsey
Chief, Graphic Unit
<table>
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<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>LATITUDE OR $y$-COORDINATE</th>
<th>LONGITUDE OR $x$-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS</th>
<th>N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
<th>DATUM CORRECTION</th>
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WARD 1948 Sub Pt.

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WAGON 1948

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<td>60 33</td>
<td>148 31</td>
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<td>501.2</td>
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1 FT = 304.8006 METER

COMPUTED BY: R. Sugden
DATE: 1/9/59
CHECKED BY: R. Kelly
DATE: 1/14/59
Preliminary manuscripts based on an office-controlled plot of the Kings Bay Area were completed in February 1959. These were furnished to the field party for the purpose of establishing photo-hydro control positions.

The plot was re-laid in August 1959 and the manuscripts re-compiled incorporating the 1959 field inspected control and shoreline.

The preliminary manuscripts were utilized for compilation, holding to the positions established by the new plot. Only minor changes in position resulted from the new plot.

31. Delineation

The 1:10,000 scale manuscripts were compiled by graphic methods, shoreline being delineated stereoscopically both from 1:10,000 ratioed infrared photographs and from 1:20,000 scale nine-lens photographs. The reflecting projector was used to fit photographic detail to manuscript scale where necessary. Field inspected photographs were used as a guide in detailing shoreline and foreshore features.

The quality of the infrared photographs was generally very poor, especially on the eastern shore, thus nine-lens photographs were used for delineation in this area. As the shoreline inspection was done primarily on the single-lens photographs, it likewise had some errors which were corrected by office interpretation of the single-lens and nine-lens photographs.

Field inspection photographs used were numbered:

Single-lens  -  58-L-5357 thru 5360
Nine-lens  56137 thru 56138, 561h0, 561h6 thru 561h8

32. Control

Control was adequate as regards identification, density and placement. (See Radial Plot Report filed with Descriptive Report T-9118)

33. Supplemental Data

None.
34. **Contours and Drainage**  
Inapplicable.

35. **Shoreline and Alongshore Features**  
Generally the low-water line outlined on the field photos, were flown at about 1 foot above low water tide, this line must be very approximate. The high-water line was delineated as field-inspected except to correct for errors obvious in a stereoscopic study of the photographs. (See Sub-heading 31 above.)

36. **Offshore Detail**  
Inapplicable.

37. **Landmarks and Mids**  
Inapplicable.

38. **Control for Future Surveys**  
Photo-hydro stations were located in the field on vinylite impressions of the preliminary manuscripts. These positions were relocated referencing to the new plot positions. This resulted in different positions for stations for CAB, DUD, EAR, and ROT on manuscript T-9817. Two positions are shown on T-9818 for station SAD as it was field identified in two different positions on the office prints used to cut in positions for the hydro control. There are no descriptions for the photo-hydro stations.

39. **Junctions**  
Junctions were effected with adjoining manuscripts.

40. **Horizontal and Vertical Accuracy**  
Vertical control inapplicable. Horizontal control — see pp 32.

41. **through 65.**  
Inapplicable.
16. **Comparison with Existing Maps**

US Geological Survey Quadrangles - Seward (C-4) and Seward (C-5), Scale 1:63,360, dated 1954. No differences noted.

17. **Comparison with Nautical Charts**

US CGS Chart #0517, Scale 1:80,000 dated January 1952 and US CGS Chart #0551, Scale 1:200,000 dated May 1952. No differences noted.

Items to be applied to Nautical Charts immediately: None.

Items to be carried forward: None.

**SUBMITTED BY:**

R. L. Sugden

**APPROVED:**

Everett E. Ramsey
Chief, Graphic Unit
Photogrammetry Division

R. L. Sugden
August 28, 1970

GEOGRAPHER NAMES

FINAL NAME SHEET

PH-152  (Alaska)

T-9818

Chugach National Forest
Kings Bay
Taylor Glacier

Approved by:

A. Joseph Waight
Chief Geographer

Prepared by:

Frank W. Pickett
Cartographic Technician
KINGS BAY
Surveys T-9118, T-9119, T-9617 through T-9621

NOTES TO THE HYDROGRAPHER

The manuscripts of the Kings Bay area were corrected to datum as established by the plot of August 1959 and positions of all photo-hydro stations were relocated to this datum. As the final plot resulted in some shift in pass point positions, local differences occur between some of the field-established photo-hydro positions and those on the final manuscript.

Those stations with significantly different positions are:

  CAB - T-9617
  PAT - T-9820
  LUX - T-9820

Photo-hydro Station PAT on manuscript T-9620 is listed as "out" on the field photo.

Photo-hydro control ends on manuscripts T-9118 and T-9618.

The manuscripts which are subject to a final office review show new positions for photo-hydro stations and the shoreline as field inspected in 1959. They with accompanying vinylite impressions of preliminary manuscripts should suffice for the completion of the hydrographic surveys.

The low-water line shown on the manuscripts was identified in the field on infrared photographs which were taken at 1 foot above low water. The line is thus very approximate.

Everett H. Yamay
Chief, Graphic Unit
Photogrammetry Division
FORM 1002(T-2) PHOTOGRAMMETRIC OFFICE REVIEW

MAP T- 9818

PROJECT PH-152

No Form 1002(T-2) was available at the time of final review and none is bound with this Descriptive Report.
FIELD EDIT REPORT

MAP T-9818

PROJECT PH-152

Field edit was accomplished in 1959 in advance of revision of this map. At the time of final review, no Field Edit Report was available and none is bound with this Descriptive Report.
61. GENERAL STATEMENT:

See Summary on page 6 of this Descriptive Report.

Only one difference of significance was found while making comparisons with other surveys. It is indicated on an ozalid comparison print (page 20) bound with the original of this report and discussed in Item 63.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

No registered topographic surveys were available for comparison.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A visual comparison was made with U.S.G.S. Quadrangles SEWARD (C-4) and (C-5), ALASKA, scale 1:63,360, dated 1952 and 1951 respectively. Differences between these surveys and T-9818 are shown in brown on the comparison print.

Only one significant difference was noted. On SEWARD (C-4) the placement of the shoreline in the vicinity of Taylor Glacier differs with the shoreline on T-9818. This may be due to the possibility that the glacier is receding or to differences in interpretation of two sets of photographs taken eight years apart.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with unverified copies of smooth sheets for surveys H-8491, scale 1:10,000, dated 1959, and H-8593, scale 1:10,000, dated 1961. Apparently T-9818 was used as a base map for shoreline. No significant differences in shoreline or alongshore features were noted.
65. **COMPARISON WITH NAUTICAL CHARTS:**

   A visual comparison was made with Chart 8517, scale 1:80,000, 9th edition, dated April 28, 1969. No significant differences in shoreline or alongshore features were noted.

66. **ADEQUACY OF RESULTS AND FUTURE SURVEYS:**

   This survey complies with Job Instructions, Bureau requirements, and the National Standards for Map Accuracy. No accuracy tests were run in the field.

   Reviewed by:

   [Signature]

   Charles H. Bishop
   Cartographer
   August 27, 1970

Approved:

[Signature]

Allen L. Powell, RADM, USESSA
Director, Atlantic Marine Center

Approved:

[Signature]

Chief, Photogrammetry Branch 58

[Signature]

Chief, Photogrammetry Division
COMPARISON PRINT

Brown = SEWARD (B-4)

Approx. position of shoreline on U.S.G.S. SEWARD (C-4)