Form 504
U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

<table>
<thead>
<tr>
<th>Type of Survey</th>
<th>SHORELINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field No.</td>
<td>Office No.</td>
</tr>
<tr>
<td></td>
<td>T-9819</td>
</tr>
</tbody>
</table>

**LOCALITY**

<table>
<thead>
<tr>
<th>State</th>
<th>ALASKA</th>
</tr>
</thead>
<tbody>
<tr>
<td>General locality</td>
<td>PRINCE WILLIAM SOUND</td>
</tr>
<tr>
<td>Locality</td>
<td>KINGS RIVER</td>
</tr>
</tbody>
</table>

1957-59

**CHIEF OF PARTY**

Field - H. J. Seaborg
Office - L. W. Swanson

**LIBRARY & ARCHIVES**

DATE
DATA RECORD

T-9819, T-9820, T-9821

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

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

Instructions dated (II) (III):
Compilation Instructions - Prince Wm. Sound Supp. 5 dated 15 December 1958
Supp. 6 dated 22 July 1959

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): NA 1927 Vertical Datum (III): MHW
Mean sea level except as follows:
Elevations shown as (2s) refer to mean high water
Elevations shown as (2) 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 (II) 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.
DESCRIPTIVE REPORT - DATA RECORD

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):

Projection and Grids ruled by (IV): Dempsey

Date: Dec. 17, 1958

Projection and Grids checked by (IV): Shoup

Date: Jan. '59

Control plotted by (III): H. Lucas

Date: Jan. '59

J. Battley

Date: Aug. '59

Control checked by (III): W. Halluin

Date: Jan. '59

R. Sugden

Date: Aug. '59

Radial Plot or Stereoscopic Control-extension by (III):

R. Sugden

Date: Sept. '59

Planimetry

Date:

Stereoscopic Instrument compilation (III):

Contours

Date:

Manuscript delineated by (III): T-9819, T-9820, T-9821:

R. Sugden

Date: Sept. '59

Sept. '59

Photogrammetric Office Review by (III): E. Ramey

Date: 22 Oct. 1959

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

Date:
Camera (kind or source) (III): USC&GS - 9-L and 1-L infrared

PHOTOGRAPHS (III)

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
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<tbody>
<tr>
<td>9-lens</td>
<td>17 May 1957</td>
<td>1350</td>
<td>1:20,000</td>
<td>9.5 above MLW</td>
</tr>
<tr>
<td>56137, 56138</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>56146, 56147,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>56148</td>
<td>7 Aug. 1958</td>
<td>1402</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single-lens</td>
<td>7 Aug. 1958</td>
<td>1208</td>
<td>1:30,000</td>
<td>4.1 ft. above MLW</td>
</tr>
<tr>
<td>58-L-5353 thru 5357</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tide (III)

Reference Station: Cordova
Subordinate Station: Wells Passage
Subordinate Station: Atlantic Marine Center

Ratio of Ranges | Mean Range | Spring Range
--- | --- | ---
9.6 | 10.0 |
9.5 | 9.7 |

Date: 9-21-70

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

Land Area (Sq. Statute Miles) (III):
Shoreline (More than 200 meters to opposite shore) (III):
3 mi.
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):
Number of Recoverable Photo Stations established (III):

Remarks:
<table>
<thead>
<tr>
<th>COMPIlATION RECORD</th>
<th>COMPLETION DATE</th>
<th>REMARKS</th>
</tr>
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<tbody>
<tr>
<td>Preliminary shoreline</td>
<td>February 1959</td>
<td>Superseded</td>
</tr>
<tr>
<td>for hydrography</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New plot, map revised after</td>
<td>Sept. 1959</td>
<td></td>
</tr>
<tr>
<td>field edit, ADVANCE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Review</td>
<td>Sept. 1970</td>
<td></td>
</tr>
</tbody>
</table>
SUMMARY TO ACCOMPANY

DESCRIPTIVE REPORT T-9819

Records for this map were not complete at the time of final review, which is 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, Alaska. T-9819 is at the southwest end 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 shoreline and alongshore features were compiled graphically, using resected ratio photographs.

Copies of the preliminary manuscript were sent to the field in the spring of 1959 for photo-hydro support. Additional horizontal control was identified on the photographs furnished and field edit was accomplished. A final plot was run, the map was revised and classified "ADVANCE".

Final Review was done at the Atlantic Marine Center in September, 1970.

The compilation manuscript was a vinylite sheet 3 minutes 45 seconds in latitude and 5 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 T-9819

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.
PHOTOMETRIC 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 CSL cards and accompanying field photo identification (June 1959) were furnished to control a new plot. The original templates 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 portion 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 posttype 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 templates. Positions of templates 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 positions did not change. The new positions were rescribed on the base sheet and replotted on the 1:10,000 scale manuscripts where the resultant error would be doubled.

The single lens photographs were resected on the manuscripts into common pass points with the nine-lens photographs 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 F3A 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>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION</th>
<th>DATUM</th>
<th>LATITUDE OR N-COORDINATE</th>
<th>LONGITUDE OR E-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET OR Projection Line in Meters</th>
<th>DATUM CORRECTION</th>
<th>N.A. 1927 - DATUM DISTANCE FROM GRID OR Projection Line in Meters</th>
<th>Factor Distance from Grid or Projection Line in Meters</th>
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<tbody>
<tr>
<td>ENGLE 1948</td>
<td>p 38</td>
<td>NA</td>
<td>60 28</td>
<td>07.946</td>
<td>1857.0</td>
<td>245.9</td>
<td>1611.1</td>
<td>1857.0</td>
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<tr>
<td>DALE 1948</td>
<td>p 43</td>
<td>&quot;</td>
<td>60 26</td>
<td>57.981</td>
<td>1857.0</td>
<td>1794.6</td>
<td>62.4</td>
<td>1857.0</td>
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<tr>
<td>Red Roofed Shack</td>
<td>VI</td>
<td>&quot;</td>
<td>60 27</td>
<td>31.471</td>
<td>1857.0</td>
<td>974.1</td>
<td>882.9</td>
<td>1857.0</td>
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<tr>
<td>PORT NELLIE</td>
<td>p 43</td>
<td>&quot;</td>
<td>60 43</td>
<td>03.585</td>
<td>917.1</td>
<td>54.8</td>
<td>862.3</td>
<td>1857.0</td>
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<tr>
<td>PEAK 99, 1948</td>
<td>VI</td>
<td>&quot;</td>
<td>60 28</td>
<td>13.96</td>
<td>1857.0</td>
<td>432.1</td>
<td>1424.9</td>
<td>1857.0</td>
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<tr>
<td>PEAK 100, 1948</td>
<td>VI</td>
<td>&quot;</td>
<td>60 29</td>
<td>42.48</td>
<td>1857.0</td>
<td>1314.8</td>
<td>542.2</td>
<td>1857.0</td>
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<tr>
<td>PEAK 101, 1949</td>
<td>VI</td>
<td>&quot;</td>
<td>60 30</td>
<td>11.58</td>
<td>1857.1</td>
<td>358.4</td>
<td>1498.7</td>
<td>1857.1</td>
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<td></td>
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<td></td>
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</tr>
</tbody>
</table>

1 FT. = 3048005 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.

A new plot was completed in August 1959 using field-identified control (June 1959). Field inspection of shoreline was also furnished.

As the new plot resulted in only minor changes of position (see Photogrammetric Plot Report filed with Descriptive Report for Manuscript T-9118), the original preliminary manuscripts were used, compilation being held to the new positions.

31. Delineation

The 1:10,000 scale manuscripts were compiled by graphic methods, shoreline being delineated stereoscopically both from 1:10,000 rertoed infrared photographs and from 1:20,000 scale nine-lens photographs using the reflecting projector to fit photographic detail to the manuscript.

The field inspection was done on single-lens infrared photographs on which detail was greatly obscured by shadow and lack of tone. Because of this the shoreline and low-water line delineated by the field party was of poor quality and was not used in some areas where an error was obvious. Field inspection was done on photographs numbered 58-L-5353 thru 5358, nine-lens 53138, 53139, thru 56148.

32. Control

Control was adequate as regards identification, density, and placement. (See plot report filed as part of Descriptive Report T-9118.)

33. Supplemental Data

None.

34. Contours and Drainage

Inapplicable.
35. **Shoreline and Alongshore Details**

As noted under Sub-heading 31, the field inspection of shoreline and low-water line was refined in compilation. Much of this was done after studying the nine-lens photographs in areas where detail was obscured on the single-lens infrared photographs.

The low-water line was identified in the field using a tone line on the infrared photographs. The stage of tide at the time of these photographs was approximately 1/4 feet. Thus the line must be very approximate.

36. **Offshore Details**

Inapplicable.

37. **Landmarks and Aids**

Inapplicable.

38. **Control for Future Surveys**

Photo-hydro stations were located in the field on a blackline impression of the preliminary manuscript. These positions were relocated to fit the new plot positions. Descriptions of photo-hydro stations were not furnished and thus field identified points had to be generally accepted as shown.

39. **Junctions**

Junctions have been made with adjoining manuscripts.

40. **Horizontal and Vertical Accuracy**

Vertical control inapplicable. Horizontal control - see pp 32.

41. through 45.

Inapplicable.
46. **Comparison with Existing Maps**


47. **Comparison with Nautical Charts**


Items to be applied to Nautical Charts immediately: None.

Items to be carried forward: None.

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**SUBMITTED BY:**

Robert L. Sugden

**APPROVED:**

Everett H. Ramey
Chief, Graphic Unit
Photogrammetry Division
August 28, 1970

GEOGRAPHIC NAMES
FINAL NAME SHEET
PH-152 (Alaska)

T-9819

Chugach National Forest
Kings Bay
Kings River
Nellie Juan River

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-9821

NOTES TO THE HYDROGRAPHER

The manuscripts of the Kings Bay area were corrected to datum as established by the plot of August 1957 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-9817
PAT - T-9820
LUX - T-9820

Photo-hydro Station PAT on manuscript T-9820 is listed as "Put" on the field photo.

Photo-hydro control ends on manuscripts T-9118 and T-9818.

The manuscripts which are subject to a final office review show new positions for photo-hydro stations and the shoreline as field inspected in 1957. 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. Dacey
Chief, Graphic Unit
Photogrammetry Division
FORM 1002(T-2) PHOTOGRAMMETRIC OFFICE REVIEW

MAP T-9819

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- 9819

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.
REVIEW REPORT T-9819
SHORELINE
SEPTEMBER 21, 1970

61. GENERAL STATEMENT:
See Summary on Page 6 of this Descriptive Report.
No ozalid comparison print was made for this map.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:
No registered topographic surveys were available at the time of final review; no comparison was made.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:
A visual comparison was made with U.S.G.S. Quadrangle SEWARD (B-5), ALASKA, scale 1:63,360, dated 1952. No significant differences were noted.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:
A comparison was made with an unverified copy of the smooth sheet for Survey H-8491, scale 1:10,000, dated 1959. No discrepancies were noted. T-9819 was used as a base for shoreline in the area compared.

65. COMPARISON WITH NAUTICAL CHARTS:
A visual comparison was made with Chart 8517, scale 1:80,000, 9th Edition, dated April 28, 1969. No discrepancies 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 test was run in the field.

Reviewed by:

Charles H. Bishop
Cartographer
September 21, 1970

Approved:

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

Approved:

Chief, Photogrammetric Branch    Chief, Photogrammetry Division