DESCRIPTIVE REPORT

Type of Survey: TOPOGRAPHIC

Field No. Office No. T-9135

LOCALITY

State: ALASKA

General locality: PRINCE WILLIAM SOUND

Locality: BLACKSTONE BAY

1948-60

CHIEF OF PARTY
Glendon E. Boothe, Field
Hubert A. Paton, Baltimore Photo Office
Louis J. Reed, Washington Office

LIBRARY & ARCHIVES

DATE
DATA RECORD

T-9135, 9136, 9137

Project No. (II): Ph-39(48)  Quadrangle Name (IV):

T-9135 = BLACKSTONE BAY
T-9136 = COCHRANE BAY
T-9137 = CULROSS ISLAND

Field Office (II): DERICKSON  Chief of Party: Glendon E. Boothe

Photogrammetric Office (III): B'more Photo Office  Officer-In-Charge: Hubert A. Paton
Washington Office, Louis J. Reed, Chief, Stereoscopic Mapping Section

Instructions dated (II) (III):

(II) Field dated 28 Jun 49

Method of Compilation (III): Reading Plotter

Manuscript Scale (III): 1:20,000  Stereoscopic Plotting Instrument Scale (III): 1:20,000

Scale Factor (III): 1:1

Date received in Washington Office (JAN 23 1951)  Date reported to Nautical Chart Branch (IV): 2-3-51

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

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

Geographic Datum (III): NA 1927  Vertical Datum (III):

Mean sea level except as follows:
Elevations shown as (2) refer to mean high water
Elevations shown as (5) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III):

Lat.:  Adj usted

Long.:  

Plane Coordinates (IV):

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.

Form T- Page 1  M-2618-12(4)
DATA RECORD

Field inspection by (II): Glendon E. Boothe Date: 1949

Pianetable contouring by (II): none Date:

Completion Surveys by (III): none Date:

Mean High Water Location (III) (State date and method of location):

Shoreline is dated 1949 since it was field inspected in 1949.

Projection and Grids ruled by (IV): Ruling Machine Date: 18 Aug 50

Projection and Grids checked by (IV): Theodore L. Janson Date: 18 Aug 50

Control plotted by (III): Orvis N. Dalbey Date: 14 Nov 50

Control checked by (III): John B. McDonald Date: 15 Nov 50

Radial Plot ok (III): ok

Frank J. Tarcza Robert L. Sugden Garnett S. Amburn
Date: 7 Jun 50 Aug 57 Feb 57

Delineation by (III)
Stereoscopic instrument and Louis Levin and Clarence E. Mifeld
Contours and
Date: 21 Sep 50

Compilation

Manuscript ok (III): ok

Louis Levin and John B. McDonald
Date: 30 Jan 51

Photogrammetric Office Review by (III) Louis J. Reed
Date: 30 Jan 51

Elevations on Manuscript checked by (II) (III):
Louis J. Reed Date: 30 Jan 51
### PHOTOGRAPHS (III)

<table>
<thead>
<tr>
<th>Number</th>
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<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
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<tr>
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<td>27 Jun 47</td>
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<td>19713-16</td>
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<td>23594-603</td>
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### Tide (III)

**Reference Station:** Cordova  
**Subordinate Station:** Culross Bay - Wells Passage  
**Atlantic Marine Center Review by (IV):** Charles H. Bishop

<table>
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<tr>
<th>Diurnal Trend Ratio of Ranges (Mean Range)</th>
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<tbody>
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**Final Drafting by (IV):**  
**Drafting verified for reproduction by (IV):**  
**Proof Edit by (IV):**

**Land Area (Sq. Statute Miles) (III):** See Remarks below  
**Shoreline (More than 200 meters to opposite shore) (III):** See Remarks below  
**Shoreline (Less than 200 meters to opposite shore) (III):** none  
**Control Leveling - Miles (II):** none  
**Number of Triangulation Stations searched for (II):**  
**Number of BMs searched for (II):** none  
**Number of Recoverable Photo Stations established (III):** none  
**Number of Temporary Photo Hydro Stations established (III):** none  

**Remarks:**

\[
\text{Land Area} = \begin{cases} \text{T-9135} & 5 \text{ sq mi} \\ \text{T-9136} & 31 \text{ sq mi} \\ \text{T-9137} & 19 \text{ sq mi} \end{cases}
\]

\[
\text{Shoreline} = \begin{cases} \text{3 miles} & \text{28 miles} \\ \text{38 miles} \end{cases}
\]
<table>
<thead>
<tr>
<th>Compilation Record</th>
<th>Completion Date</th>
<th>Remarks</th>
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<tr>
<td>Contours and shoreline</td>
<td>1951</td>
<td>Superseded</td>
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<tr>
<td>Shoreline revised from 1958 photographs</td>
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<td></td>
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<tr>
<td>Final review</td>
<td>1970</td>
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SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-9135

At the time of final review, which is several years after compilation, many of the records concerning this map have been lost or misplaced and were not available for the final reviewer's use. The Compilation Record and Form 164 Control Record were prepared by the final reviewer. Notes concerning the absence of reports are inserted where the reports should be in this Descriptive Report.

No compilation report was available when this map was reviewed.

Compilation of the contoured area was by Reading Plotter in 1950 and 1951, using 1:20,000 scale, nine-lens photographs taken in 1947 and 1948. In 1957 a preliminary radial plot was run at 1:20,000 scale for the purpose of completing the area south of the contouring limit (60° 43'). Nine-lens photographs with mostly office-identified control were used for the 1957 plot. In 1960 another radial plot was run at 1:20,000 scale, using nine-lens photographs with field-identified control, to verify the previous plot. Photographs used in the radial plots were taken in 1948.

No mapping was done on this map west of longitude 148° 45'. Topography is incomplete; no contours were mapped south of latitude 60° 43'.

It is not known if hydro-support data was furnished to the hydrographic party.

There was no data available to the final reviewer concerning field edit; it is not known if field edit was performed.

Final review was done at the Atlantic Marine Center during July 1970.

The compilation manuscript was a vinylite sheet 7½ minutes in latitude and 20 minutes in longitude.

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

2-20

Field inspection was accomplished in 1949 in conjunction with hydrographic operation in the area. The report on this field inspection was meager and can be found in the 1949 season's report of the USC & GS Ship DERICKSON, Project CS-277, Prince William Sound, Alaska, Glendon E. Boothe, Chief of Party, Commanding, a copy of which report relative to field inspection follows:

4. Field Inspection of Air Photographs

Unfortunately air photographs of the area of the working grounds were not available. Under date of 9 Aug 49 instructions were received to make a field inspection of air photographs covering Passage Canal, Wells Passage, Pigot Bay, and heads of Blackstone Bay, Cochrane Bay, Fort Wells, and Ogilross Passage. All triangulation stations in the area were recovered, and where possible the station was located on the air photographs. All of the shoreline was inspected from small boats cruising along close to the beach, landings were made as necessary for inspection purposes, the high water line was determined and off-lying rocks were inspected and notes made on the photographs. The usual standard practices for this type of work were used. A new oil dock at Whittier was located by measurement on the ground and placed on the air photograph.
See combined descriptive report for map manuscripts T-9131, T-9132, and T-9133, page 8, which report applies here since the same plot covered all six quadrangles.
RADIAL PLOT REPORT

MAP T-9135

PROJECT PH-152

A Radial Plot Report is mentioned in Item 32 of the Compilation Report for T-9131, 9132, and 9133. This plot report was not available at the time of final review and is not bound with this Descriptive Report.

The following sketch (original bound with T-9135) is for the 1950 plot.

July 15, 1970
PHOTOGRAHMETRIC PLOT REPORT
Prince William Sound, Alaska
Project Ph-152
August 1957

21. **Area Covered**

This radial plot covers the southern parts of Cochrane Bay and Blackstone Bay. It is at 1:20,000 scale and completes an area on Manuscripts T-9135 and T-9136 between a 1:20,000 scale plot to the north and 1:10,000 scale plots to the south and east.

22. **Method**

Four vinylite manuscripts, T-9131, T-9132, T-9135 and T-9136 at 1:20,000 scale were joined together at the grid lines.

Nine-lens metal-mounted photographs were used in the plot. Mylar templates were prepared using a master templet for correcting distortion errors.

The plot was begun in the northern part. Here adequate control was available in the previous plot and there was no problem in junctioning. The plot was extended southward holding to additional control stations. A satisfactory junction was achieved with plots to the south and east.

Six additional control stations were identified on the nine-lens photographs to extend the plot and strengthen positions. (See radial plot sketch which shows discrepancies with horizontal control positions).

Positions established by this plot are circled in red on the manuscripts whereas positions on the prior plot are in blue.

23. **Adequacy of Control**

As stated in paragraph 22 above positions to the north were well controlled. Four well described stations in the south part of Blackstone Bay were office identified. The two stations added in south Cochrane Bay (Hass 1948 & Jello 1948) were used in the plot to the south. Control was adequate and good junction was effected.

24. **Supplemental Data - None**

25. **Photography**

A flight of photographs in each bay area was available. Though one in between would have been helpful, it was not necessary as sufficient photographs and control were used in the plot to the north to establish good junction positions. There was also sufficient
control throughout so that each flight could be laid independently. Though the overlap was small, ties were made between flights. (See sketch for arrangement of photographs).

Submitted by:

Robert L. Sugden

Robert L. Sugden

Approved:

Everett H. Ramsey
Chief, Graphic Compilation Unit
PHOTOGRAMMETRIC PLOT REPORT
PRINCE WILLIAM SOUND, ALASKA
PROJECT PH-152
FEBRUARY 1960

A preliminary plot of this area, using mostly office-identified control, was done in August 1957. The purpose of this radial plot was to verify previous plot with additional field-identified control accomplished in May and June 1959 by H. J. Seaborg.

21. AREA COVERED:

This radial plot covers the southern part of Cochrane Bay and Blackstone Bay. It is at 1:20,000 scale and completes an area on Manuscripts T-9135 and T-9136.

22. METHOD:

Four vinylite manuscripts, T-9131, T-9132, T-9135, and T-9136, were joined together at the grid lines. Nine-lens, metal-mounted photographs were used in the plot. Mylar templates were prepared, except Nos. 23402, 23418, and 23450 through 23452. These templates were from the 1957 plot with the additional control added. The plot was begun at approximate latitude 60° 49' and extended south to complete T-9135 and T-9136.

23. ADEQUACY OF CONTROL:

The additional control was very adequate. All stations held, except XENO 1948. It was within 0.4 mm.

24. SUPPLEMENTAL DATA:

None.
25. PHOTOGRAPHY:

The spacing and quality of the photographs were adequate for an accurate plot. A photogrammetric plot sketch is submitted with this report.

Note: See radial plot reports dated December 1956 and August 1957.

Submitted by:

Garnett S. Amburn
**FEBRUARY 1960**

**PROJECT PH-152**

**TRIANGULATION STATION RADIAL PLOT TOLERANCES**

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<tr>
<th>Station</th>
<th>Tolerance</th>
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<tr>
<td>ALSO</td>
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<tr>
<td>AMBER</td>
<td>1959 held</td>
</tr>
<tr>
<td>AREA</td>
<td>1959 held</td>
</tr>
<tr>
<td>BUNT</td>
<td>1959 held</td>
</tr>
<tr>
<td>DECISION POINT LIGHT</td>
<td>1948 held</td>
</tr>
<tr>
<td>ENVY</td>
<td>1948 held</td>
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<tr>
<td>GAIN</td>
<td>1959 held</td>
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<td>HORSE</td>
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<td>JELLO</td>
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<td>KAPOK</td>
<td>1948 held</td>
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<td>PEAK NO. 3 1914</td>
<td>&quot; 86</td>
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<td>PEAK NO. 58 1947</td>
<td>&quot; 73</td>
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COMPUTED BY CHB DATE 7-6-70  
CHECKED BY LFB DATE 7-14-70
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<th>DATUM</th>
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<th>LONGITUDE OR X COORDINATE</th>
<th>DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 FT. = 3048006 meter)</th>
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COMPUTED BY CHB    DATE  7-6-70  CHECKED BY LFB    DATE  7-14-70
COMPILATION REPORT

MAPS T-9135, T-9136, AND T-9137

PROJECT PH-152

There was no compilation report for these maps available at the time of final review.
GEOGRAPHIC NAMES
FINAL NAME SHEET
PH-152 (Alaska)
T-9135

Blackstone Bay
Blackstone Glacier
Chugach National Forest
Lawrence Glacier
Ripon Glacier
Shakespeare Glacier
Whittier Glacier
Willard Island

August 21, 1970

Approved by:

A. Joseph Wright
Chief Geographer

Prepared By:
Frank W. Pickett
Cartographic Technician
Project Ph-152
Prince William Sound

Notes to the Hydrographer for
T-9131, T-9132, T-9135 and T-9136

Surveys T-9131, T-9132 and a portion of T-9135 and T-9136 were compiled in 1950-51 to include contours. In 1958 the compilation of shoreline was extended southward to the head of Blackstone Bay and of Cochrane Bay.

Datum for these surveys was established by photogrammetric plots based on field identified and office identified control stations. The datum is considered final.

Nine-lens photographs taken in 1947 and 1948 were used for base compilation. In addition, infra-red single lens photographs were used to supplement the nine-lens photographs. These single lens photographs were not included in the plot.

Paper prints of nine-lens photographs have been prepared with pass points for use by the hydrographic party in positioning hydrographic stations by photogrammetric methods and in completing field inspection. Prints of the infra-red photographs ratioed to the scale of the manuscripts are also available for field inspection. The field party should verify the compilation of all shoreline features if practicable.

Everett H. Ramey
Chief, GraphicCompilation Unit
PHOTOGRAMMETRIC OFFICE REVIEW
T-9135, 9136, 9137.

1. Projection and grids  
2. Title  
3. Manuscript numbers  
4. Manuscript size  

CONTROL STATIONS
5. Horizontal control stations of third-order or higher accuracy  
6. Recoverable horizontal stations of less than third-order accuracy (topographic stations)  
7. Photo hydro stations  
8. Bench marks  
9. Plotting of sextant fixes  
10. Photogrammetric plot report  
11. Detail points

ALONGSHORE AREAS
(Nautical Chart Data)
12. Shoreline  
13. Low-water line  
14. Rocks, shoals, etc.  
15. Bridges  
16. Aids to navigation  
17. Landmarks  
18. Other alongshore physical features  
19. Other alongshore cultural features

PHYSICAL FEATURES
20. Water features  
21. Natural ground cover  
22. Planetary contours  
23. Stereoscopic instrument contours  
24. Contours in general  
25. Spot elevations  
26. Other physical features

CULTURAL FEATURES
27. Roads  
28. Buildings  
29. Railroads  
30. Other cultural features

BOUNDARIES
31. Boundary lines  
32. Public land lines

MISCELLANEOUS
33. Geographic names  
34. Junctions  
35. Legibility of the manuscript  
36. Discrepancy overlay  
37. Descriptive report  
38. Field inspection photographs  
39. Forms

40.Reviewer

Louis Reed, Chief
Stereoscopic Mapping Section

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT
42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

Compiler
Supervisor

43. Remarks:
FIELD EDIT REPORT

MAP T-9135

PROJECT PH-152

No Field Edit Report for this map was available at the time of final review.
GENERAL STATEMENT:

See Summary on page 6 of this Descriptive Report.

An ozalid comparison print (pages 26 through 28), with differences noted in Items 63 and 65 is bound with the original of this Descriptive Report.

COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

No registered topographic surveys of this map area were available for comparison.

COMPARISON WITH MAPS OF OTHER AGENCIES:

A comparison was made with U.S.G.S. Quadrangle SEWARD (C-5), ALASKA, scale 1:63,360, dated 1951. Differences between this map and T-9135 are shown in brown on the comparison print.

Considering the large difference in scale, the general trend of the shoreline compares well. Displacement was noted on the northeast side of Willard Island, and there are large shoreline differences in areas where glaciers have receded.

Two rocks awash not visible on the photographs are noted on the comparison ozalid - one at latitude 60° 43.5', longitude 148° 37.3'; the other at latitude 60° 42.8', longitude 148° 35.4'.

COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

The only survey available for comparison was a verified copy of H-7732. No shoreline or alongshore features appear on this survey; no differences with this survey appear on the comparison print.
65. **COMPARISON WITH NAUTICAL CHARTS:**

A comparison was made with Chart 8517, scale 1:80,000, 9th Edition, dated April 28, 1969. Differences between this chart and T-9135 are shown in red on the comparison print.

Large differences in shoreline placement were noted. Generally, the chart shoreline is east of the shoreline on T-9135. Part of this difference is probably due to the fact that the chart was brought to a four times enlargement for comparison.

Bare rocks are charted in the vicinity of latitude 60° 43', longitude 148° 40', and at latitude 60° 42.3', longitude 148° 40.5'. These rocks are not visible on the photographs and are not mapped on T-9135.

A rock awash at latitude 60° 43.5', longitude 148° 37.3' is not visible on photographs covering the area and is not mapped on T-9135. This is probably the same as the first rock awash noted in Paragraph 3, Item 63.

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:

Charles H. Bishop

Cartographer
July 10, 1970

Approved by:

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

Approved by:

Chief, Photogrammetric Branch

Chief, Photogrammetry Division
COMPARISON PRINT

Red = Chart 8517
Brown = U.S.G.S. Quad
SEWARD (C-5)
COMPARISON PRINT

Red = Chart 8517
Brown = U.S.G.S. Quad SEWARD, (C-5)
COMPARISON PRINT
Red = Chart 8517
Brown = U.S.G.S. Quad SEWARD (C-5)