# DESCRIPTIVE REPORT

**Type of Survey**  |  TOPOGRAPHIC  
---|---
**Field No.**  |  Office No.  
---|---
|  T - 9133  

**LOCALITY**

**State**  |  ALASKA  
---|---
**General locality**  |  PRINCE WILLIAM SOUND  
---|---
**Locality**  |  ESTHER ISLAND  
---|---

1947 - 51

**CHIEF OF PARTY**

Glendon E. Booth - Field  
Hubert A. Paton - Baltimore Photo Office  
Louis J. Reed - Washington Office

**LIBRARY & ARCHIVES**

**DATE**
**DESCRIPTIVE REPORT - DATA RECORD**

**T-9133**

**PROJECT NO. (III):**
PH-152

**FIELD OFFICE (III):**
Ship DERICKSON

**CHIEF OF PARTY**
Glendon E. Boothe

**PHOTOGRAFMETRIC OFFICE (III):**
Baltimore Photo Office
Washington Office

**OFFICER-IN-CHARGE**
Hubert A. Paton
Louis J. Reed, Chief,
Stereo Map Section

**INSTRUCTIONS DATED (III):**
II Field, dated 28 June 1949

**METHOD OF COMPILATION (III):**
Reading Plotter

**MANUSCRIPT SCALE (III):**
1:20,000

**STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):**
1:20,000

**DATE RECEIVED IN WASHINGTON OFFICE (IV):**

**DATE REPORTED TO NAUTICAL CHART BRANCH (IV):**

**APPLIED TO CHART NO.:**

**DATE:**

**DATE REGISTERED (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):**
BIRD 1947

**LAT.:**
60° 49' 33.049"

**LONG.:**
118° 08' 14.642"

**ADJUSTED**

**UNADJUSTED**

**PLANE COORDINATES (IV):**

**Y:**

**X:**

**STATE**

**ZONE**

Roman numerals indicate whether the item is to be entered by (III) 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.
<table>
<thead>
<tr>
<th>Field Inspection by (I):</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glendon E. Boothe</td>
<td>1949</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Mean High Water Location (III): (State Date and Method of Location):</th>
<th>Date:</th>
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<tbody>
<tr>
<td>1949</td>
<td></td>
</tr>
<tr>
<td>Compiled from aerial photographs taken in 1947 and 1948</td>
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<table>
<thead>
<tr>
<th>Projection and Grids Ruled by (IV):</th>
<th>Date:</th>
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<tbody>
<tr>
<td>Ruling machine</td>
<td>8-11-50</td>
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</tbody>
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<table>
<thead>
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<th>Projection and Grids Checked by (IV):</th>
<th>Date:</th>
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<tr>
<td>T. L. Janson</td>
<td>8-11-50</td>
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</table>

<table>
<thead>
<tr>
<th>Control Plotted by (III):</th>
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<tbody>
<tr>
<td>O. N. Dalbey</td>
<td>11-14-50</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Control Checked by (III):</th>
<th>Date:</th>
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</thead>
<tbody>
<tr>
<td>L. J. Reed</td>
<td>1950</td>
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<table>
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<th>Radial Plot or Stereoscopic Control Extension by (III):</th>
<th>Date:</th>
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<tr>
<td>F. J. Tarcza</td>
<td>6-7-50</td>
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<tbody>
<tr>
<td>Planimetry</td>
<td>1950</td>
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<tr>
<td>L. Levin and C. Misfeldt</td>
<td></td>
</tr>
<tr>
<td>Contours</td>
<td></td>
</tr>
<tr>
<td>L. Levin and C. Misfeldt</td>
<td>1950</td>
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</table>

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<tr>
<th>Manuscript Delineated by (III):</th>
<th>Date:</th>
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</thead>
<tbody>
<tr>
<td>L. Levin and J. B. McDonald</td>
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</table>

<table>
<thead>
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<tr>
<th>Photogrammetric Office Review by (III):</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>L. J. Reed</td>
<td>1951</td>
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</tbody>
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| Remarks:                                 |               |
CAMERA (KIND OR SOURCE) (III):

U.S.G.S. 9-lens Camera "B", F = 8.25"

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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</thead>
<tbody>
<tr>
<td>19713 - 19716</td>
<td>27 June 1947</td>
<td>11:51</td>
<td>1:20,000</td>
<td>5.5 ft. above MLLW</td>
</tr>
<tr>
<td>23600 - 23603</td>
<td>3 Sept. 1948</td>
<td>10:38</td>
<td>1:20,000</td>
<td>7.4 ft. above MLLW</td>
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</table>

TIDE (III) (PREDICTED)

REFERENCE STATION: Cordova

SUBORDINATE STATION: Culross Bay, Wells Passage

SUBORDINATE STATION:
Atlantic Marine Center

REVIEW BY (IV): Charles H. Bishop

DATE: 6-26-70

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (III): RECOVERED: IDENTIFIED:

NUMBER OF BM(S) SEARCHED FOR (III): RECOVERED: IDENTIFIED

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

REMARKS:

Linear miles of shoreline: 36
Land area: 45
<table>
<thead>
<tr>
<th>Compilation Record</th>
<th>Completion Date</th>
<th>Remarks</th>
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</thead>
<tbody>
<tr>
<td>Contours and shoreline</td>
<td>1951</td>
<td></td>
</tr>
<tr>
<td>Final review</td>
<td>July 1970</td>
<td></td>
</tr>
</tbody>
</table>
SUMMARY TO ACCOMPANY

DESCRIPTIVE REPORT T-9133

At the time of final review, which is twenty years after compilation, many of the records concerning this map were not available for the final reviewer's use. Data Record Forms 181a, 181b, and 181c, 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.

A compilation report covering three T-sheets is included as part of this Descriptive Report. It is not dated, nor does the title indicate which maps it covers. The contents indicate that it is for T-9131, T-9132, and T-9133. Items 31 and 35 of this report indicate that there was field inspection. Field photographs indicate that the inspection was done by the ship DERICKSON in 1949. Field inspection by the ship LESTER JONES in 1951 was applied to the manuscript during final review. Only the Lake Bay and Quillian Bay areas were affected by this inspection.

Compilation was by Reading Plotter, Model A, using 1:20,000 scale nine-lens photographs taken in 1947 and 1948. All features were delineated simultaneously, using field inspection as a guide.

The area is covered by the following photographs:

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>19712 through 19718</td>
<td>54 W 2366 through 2369</td>
</tr>
<tr>
<td>23600 through 23605</td>
<td>54 W 2455 through 2460</td>
</tr>
<tr>
<td>23636 through 23637</td>
<td>54 W 2467 through 2472</td>
</tr>
<tr>
<td></td>
<td>54 W 2518 through 2530</td>
</tr>
</tbody>
</table>

It is not known if the 1954 photography was used to update this map.

There is no compilation east of longitude 148°00'. Mapping is complete west of this longitude.

It does not appear that data was furnished for hydrographic support; hydrography was accomplished in 1948.
There was no data available to the final reviewer stating that field edit had been performed.

Final review was done at the Atlantic Marine Center during June 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 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, Cochranc Bay, Fort Wells, and Gilross 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.
RADIAL PLOT REPORT

21 - 30

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-9133

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
## DESCRIPTIVE REPORT CONTROL RECORD

<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>DATUM</th>
<th>LATITUDE (DD.MM)</th>
<th>LONGITUDE (DD.MM)</th>
<th>N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 ft. = 304.8006 meter)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASE 1912</td>
<td>Vol. VI, P. 52</td>
<td>NA 1927</td>
<td>60.45</td>
<td>148.08</td>
<td>849.8</td>
</tr>
<tr>
<td>BIRD 1947</td>
<td>&quot;</td>
<td></td>
<td>60.49</td>
<td>148.08</td>
<td>1022.9</td>
</tr>
<tr>
<td>BOWL 1947</td>
<td>&quot;</td>
<td></td>
<td>60.50</td>
<td>148.07</td>
<td>1540.6</td>
</tr>
<tr>
<td>CUIROSS 1914</td>
<td>&quot;</td>
<td></td>
<td>60.45</td>
<td>148.08</td>
<td>962.9</td>
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<tr>
<td>EST 1912</td>
<td>&quot;</td>
<td></td>
<td>60.47</td>
<td>148.07</td>
<td>870.8</td>
</tr>
<tr>
<td>ESTHER 1914</td>
<td>&quot;</td>
<td></td>
<td>60.47</td>
<td>148.06</td>
<td>1532.9</td>
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<tr>
<td>LIME 1912</td>
<td>&quot;</td>
<td></td>
<td>60.45</td>
<td>148.05</td>
<td>750.5</td>
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<tr>
<td>PEAK N 1947</td>
<td>&quot;</td>
<td></td>
<td>60.51</td>
<td>148.06</td>
<td>634.4</td>
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<tr>
<td>PEAK O 1947</td>
<td>&quot;</td>
<td></td>
<td>60.49</td>
<td>148.07</td>
<td>160.8</td>
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<tr>
<td>PEAK P 1947</td>
<td>&quot;</td>
<td></td>
<td>60.49</td>
<td>148.07</td>
<td>160.8</td>
</tr>
<tr>
<td>PEAK NO. 20 1914</td>
<td>&quot;</td>
<td></td>
<td>60.47</td>
<td>148.00</td>
<td>1804.8</td>
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<tr>
<td>PEAK NO. 52 1947</td>
<td>&quot;</td>
<td></td>
<td>60.50</td>
<td>147.59</td>
<td>510.8</td>
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**Computed by:** CHB 6-23-70  
**Checked by:** LFB 6-24-70
<table>
<thead>
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<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>DATUM</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>SCALE FACTOR</th>
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<tbody>
<tr>
<td>PEAK NO. 53 1947</td>
<td>Vol. VI, P. 72</td>
<td>NA 1927</td>
<td>60.47</td>
<td>56.65</td>
<td>1753.4</td>
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<td>PETER 1948</td>
<td>&quot;</td>
<td>&quot;</td>
<td>60.45</td>
<td>32.260</td>
<td>998.5</td>
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<td>PITCH 1947</td>
<td>&quot;</td>
<td>&quot;</td>
<td>60.51</td>
<td>41.717</td>
<td>1291.3</td>
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<td>POINT ESTHER LIGHT 1947</td>
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<td>&quot;</td>
<td>60.47</td>
<td>10.198</td>
<td>315.6</td>
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<td>PORT 1914</td>
<td>&quot;</td>
<td>&quot;</td>
<td>60.48</td>
<td>07.253</td>
<td>224.5</td>
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<td>SCARE 1948</td>
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<td>&quot;</td>
<td>60.45</td>
<td>23.862</td>
<td>738.6</td>
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<td>SPLIT (SPILT 1914) 1947</td>
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<td>&quot;</td>
<td>60.45</td>
<td>53.815</td>
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<td>STO 1912</td>
<td>&quot;</td>
<td>&quot;</td>
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<td>&quot;</td>
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<td>&quot;</td>
<td>60.46</td>
<td>57.222</td>
<td>1771.1</td>
</tr>
</tbody>
</table>

**COMPUTED BY**

CHB 6-23-70

**CHECKED BY**

LFB 6-24-70
31. Delineation:

Shoreline, Contours, and all cultural features were delineated simultaneously on the Reading Plotter, model "A". Inspection was used as a guide during this delineation and applied finally during manuscript compilation. West coverage was complete for the area mapped the area adjacent to the coast to a depth reaching the general line of high peaks beyond which visibility from shipboard was considered this did allow the completion of the land area falling within the limits of any one quadrangle. This inspection was complete as far as it went but did not include the upper reaches of Blackstone Bay, Cochrane Bay, and the shores of Guilfoos Island except for a short distance along its north coast. More area could have been mapped using this same photography had the additional inspection been made along with control identification. Mapped areas are complete within the limits to which the mapping was extended.

32. Control:

Reference side-heading 23 of the Radial Plot Report, page 102 of this report, which deals primarily with horizontal control.

Vertical control for contouring purposes was furnished by the shoreline datum, and by elevations on triangulation stations and distant peaks obtained during triangulation. Peak No. 68 was found to be badly out of position (61) and has been omitted from the manuscript.

33. Supplemental Data:

(a) Plotting instrument rectified photos:


(b) Field inspection photos:

19698, 700, 700, 701, 702, 714, 715, 716, 715, 719, 723, 720, and
23405, 406, 447, 447, 445, 446, 446, 446, 447, 448, 448, 449, 449, 449, 454, 455, 455, 455, 455, 553, 553, 553, 553, 553, 585, 585, 586, 587, 587, 588, 589, 589, 600, 600, 600, 601.
(c) Graphic Control Surveys:

(1) T-3278, Perry Island and entrance to Port Wells, Prince William Sound, Alaska.
(2) T-3278a, July 1914, 1:20,000, Port Wells, Prince William Sound, Alaska, Ship TAKU, Rude cmdg.
(3) T-3404, Passage Canal, Alaska.

(d) Hydrographic Surveys:

(1) H-3403, 1912 season, 1:20,000, Perry Island Passage, Prince William Sound, Alaska, Ship TAKU, Rude cmdg.
(2) H-3538, 1913 season, Passage Canal, Prince William Sound, Ship TAKU, Gilbert T. Rude cmdg.
(4) H-3689, 1914 season, 1:20,000, South End of Port Wells and into the Entrance to Passage Canal to Point Decision, Alaska, Ship TAKU, Gilbert T. Rude cmdg.
(5) H-3694, 1914 season, 1:10,000, Passage Canal, Point Decision to Billings Delta, Alaska, Rude cmdg.

34. Contours and Drainage!

The quality of photography was not altogether satisfactory for contouring purposes; the detail in general was not as sharp as usual, shadows were exceptionally long because the photographs were exposed after mid-day, and above 2000 ft in elevation snow caused some difficulty. Very tall timber in limited areas made contouring a bit of a problem. Further, two separate sets of photographs taken in different years were involved requiring nearly double the number of models to complete both shoreline and contouring. However, a satisfactory compilation has been achieved with no areas of questionable contours other than snow covered areas.
35. **Shoreline and Alongshore Features:**

Field inspection of the shoreline was quite adequate except in Whittier and has been applied to the map manuscript after compilation of the plotting instrument work sheets. The photography was taken near the time of high tide causing very little low-water and/or sound lines to be located; no attempt has been made to extend these lines in the office.

36. **Offshore Details:**

Most offshore details were close in to shore and were covered in shoreline features in side-heading 35 above.

37. **Landmarks and Aids:**

See Nautical Chart Branch file "Chart-Letter File No 335 (1949)" letter to The Director under date of 12 May 1949, with Commander Glendon E. Booth as commander of the ship "BOMARC" subject "Landmarks for Location of Floating Aids to Navigation in Orca Inlet", wherein the following information is listed:

(a) Landmarks which fall entirely within the limits of map manuscript T-9131:

1. Green Water Tower, Conical Top.
2. Sawmill, West Twin Stack.
3. Red Tank, Cylindrical, Steel.

(b) Navigation Aids falling entirely within the limits of map manuscript T-9132:

1. Point Pigot Light.
2. Decision Point Light.
3. Trinity Point Light.

No prominent objects for landmarks were mentioned or recommended in reports of 1912-14 surveys in the area of these three quadrangles. No aids existed at that time. No additional aids or landmarks were recommended in the more recent surveys of 1947-48.

38. **Control for Future Surveys:**

None.

39. **Junctions:**

All junctions are in agreement.

40. **Horizontal and Vertical Accuracy:**

Standard.
41. Compilation Limits:

The entire land areas within the limits of the three quadrangles of this report have not been completely mapped during the initial phase ending January 1951. In general, only shoreline and the strip of land area immediately shoreward have been completed where field inspection has been furnished. This field inspection to date has not covered all the shoreline within the quadrangles. It is planned to complete the inspection permitting the compilation to be completed also. At that stage quadrangles T-9136 and T-9137 will be 100% compiled; T-9135 may not be complete since the western half of it reaches beyond chart requirements into a solid land-area where field inspection and control identification may not be executed.

The area covered in the first phase of compilation includes all the ground areas and shorelines to the north and east of an approximate line joining 60°45’N by 143°45’W to 60°41’ by 148°06’ not including Ferry Island.
46. Comparison with Existing Maps:

47. Comparison with Nautical Charts:
   See Supplemental Data, side-heading 33, this report.

48. Geographic Name List:
   See separate page following.

49. Notes for the Hydrographer:
   None.

50. Compilation Office Review:
   See T-2 form following.

Submitted by:

[Signature]
Orvis N. Dalley
Cartographer-Photogrammetric

Approved and Forwarded by:

[Signature]
Louis J. Reed
Photogrammetric Engineer, Chief, Stereoscopic Mapping Section
GEODETIC NAMES
FINAL NAME SHEET
PH-152  (Alaska)
T-9133

Chugach National Forest
Culross Bay
Culross Island
Culross Passage
Esther Island
Esther Lake
Esther Rock
Granite Bay
Hodgkins Point
Lake Bay
Point Culross
Point Esther
Port Wells
Quillian Bay
Wells Passage

August 21, 1970

Approved by:

[Signature]
A. Joseph Wright
Chief Geographer

Prepared by:

[Signature]
Frank W. Pickett
Cartographic Technician
49. **NOTES FOR THE HYDROGRAPHER:**

There were no Notes for the Hydrographer available at the time of final review.
FORM 1002 - PHOTOGRAMMETRIC OFFICE REVIEW

MAP T-9133

PROJECT PH-152

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

MAP T-9133

PROJECT PH-152

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

   See Summary, which is page 6 of this Descriptive Report.

   An ozalid comparison print (pages 26 through 30), with differences noted in Items 62, 63, 64, and 65, is included with the original of this report.

62. **COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:**

   Shoreline comparisons were made with Surveys Nos. T-3278 and T-3278a, both at 1:20,000 scale and both dated 1912. These did not extend north of latitude 60°49’; no comparison with registered topographic surveys was made north of this latitude.

   Differences between these registered surveys and T-9133 are shown on the comparison print in blue.

   The general trend of the shoreline is the same, but there are many differences in placement; the larger differences being in the Lake Bay and Quillian Bay areas.

   T-9133 supersedes previous topographic surveys for chart construction purposes.

63. **COMPARISON WITH MAPS OF OTHER AGENCIES:**

   A shoreline comparison was made with U.S.G.S. Quadrangles SEWARD (D-3) and (D-4), ALASKA, scale 1:63,360, dated 1952. Differences between these surveys and T-9133 are shown in brown on the comparison print.

64. **COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:**

   A comparison was made with a verified copy of H-8608, scale 1:10,000, dated 1961. The only coverage was in the vicinity of Culross Passage. Differences with T-9133 are shown with purple pencil on the comparison print bound with the original of this Descriptive Report.
65. **COMPARISON WITH NAUTICAL CHARTS:**

A comparison was made with Chart 8517, scale 1:80,000, 9th Edition, dated April 28, 1969. Differences with this chart and T-9133 are shown in red on the comparison print.

Large differences were indicated on the west side of Esther Island between latitude 60° 49' and 60° 52.5', at the head of Lake Bay, and in Quillian Bay. Shoreline at the northeast corner of Culross Island is displaced approximately 5 mm. The shoreline of Lake Esther on the chart is only an approximation. It is realized that the enlargement of the chart has much to do with these discrepancies.

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

Charles H. Bishop
Cartographer
June 26, 1970

Approved:

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

Approved:

Chief, Photogrammetric Branch

Chief, Photogrammetry Division