U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey: Air Photographic
Field No.: Office No.: T-8470

LOCALITY
State: Alaska
General Locality: Prince William Sound
Locality: Montague Island - Patton Bay

1942
CHIEF OF PARTY
L. C. Lande

LIBRARY & ARCHIVES
DATE: December 20, 1949
DATA RECORD

T-8470

Quadrangle (II): Project No. (II): None

Field Office: Chief of Party:


Instructions dated (II III): None Copy filed in Descriptive Report No. T-

Completed survey received in office:

Reported to Nautical Chart Section:

Reviewed: Oct., 1949 Applied to chart No. Date:

Redrafting Completed:

Registered: 10-28-49 Published:

Compilation Scale: 1:20,000 Published Scale:

Scale Factor (III): 1.0

Geographic Datum (III): Valdez Datum Plane (III):

Reference Station (III): RIVER 1933 G-1707, p. 3

Lat.: Long.: Adjusted Unadjusted

State Plane Coordinates (VI):

X = Y =

Military Grid Zone (VI)
<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
</tr>
</thead>
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<tr>
<td>11057</td>
<td>6-8-43</td>
<td>12.05</td>
<td>1:20,000</td>
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<tr>
<td>11058</td>
<td>1-15</td>
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</table>

**Tide from (III):**

Mean Range:  
Spring Range: 

Camera: (kind or source) nine-lens

Field Inspection by: none  
Field Edit by: none

Date of Mean High-Water Line Location (III):

Projection and Grids ruled by (III) Wash. Office  
" " " " checked by: Wash. Office  
Control plotted by: Harvey F. Nelson  
Control checked by: Gordon B. Willey  
Radial Plot by: Harvey F. Nelson  
Detailed by: Harvey F. Nelson  
Reviewed in compilation office by: 

Manuscript 
Elevations on Field-Edit-Sheet  
checked by: G. B. Willey  

Date: Dec. 1943  Date: Dec. 1943  Date: Dec. 1943  Date: Sept. 1949  Date: Jan. 1943  Date: Feb. 1943  Date: Sept. 1949
STATISTICS (III)

Land Area (Sq. Statute Miles):

Shoreline (More than 200 meters to opposite shore):

Shoreline (Less than 200 meters to opposite shore):

Number of Recoverable Topographic Stations established: None

Number of Temporary Hydrographic Stations located by radial None plot:

Leveling (to control contours) - miles: None

Roman numerals indicate whether the item is to be entered
by, (II) Field Party, (III) Compilation Party, or, (VI) the
Washington Office.

When entering names of personnel on this record give the
surname and initials (not initials only).

Remarks:
STATEMENT TO ACCOMPANY
DESCRIPTIVE REPORT
T-8470
MONTAGUE ISLAND, PRINCE WILLIAM SOUND, ALASKA

Topographic Sheet T-8470 covers the southeastern end of Montague Island, Alaska, Latitude 59°-50' to 60°-03' and Longitude 147°-20' to 147°-39'. The map manuscript has been cut along the 59°-56' Latitude line making T-8470 N/2 and T-8470 S/2.

No Project Number has been assigned to this map manuscript.

Final Review was completed on T-8470 without benefit of field inspection of any kind.

The following data has been filed and may be obtained as follows:

1. Filed in the Division of Photogrammetry
   (a) 1:20,000 scale map manuscript, T-8470 N/2 and T-8470 S/2, with final review corrections applied.
   (b) A copy of Descriptive Report T-8470.

2. Filed in the Coast and Geodetic Survey Archives
   (a) 1:20,000 scale cloth mounted lithographic print of the map manuscript, T-8470 N/2 and T-8470 S/2.
   (b) Descriptive Report T-8470.

Gordon B. Tilley
October 1949
Air Photographic Survey T-8470
Patton Bay
Vicinity of Montague Island, Alaska
1:20,000

1. The Air Photographic Survey T-8470 was compiled in the Washington Office from nine-lens photographs without field inspection of either the control or the shoreline.

The photographic plot for this survey consisted of a scheme of graphic triangulation (radial line plot) based on the existing triangulation (ground control) that could be identified on the photographs.

2. The following triangulation stations were identified on the photographs and were held in the radial plot:

<table>
<thead>
<tr>
<th>Sept</th>
<th>Nat</th>
<th>Squeeze</th>
<th>Isle</th>
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</thead>
<tbody>
<tr>
<td>Ate</td>
<td>Dub</td>
<td>River</td>
<td>Shirt</td>
</tr>
<tr>
<td>Dome</td>
<td>Box</td>
<td>Pointed</td>
<td>Rock</td>
</tr>
</tbody>
</table>

The above triangulation stations were established in 1933 on the Valdez Datum.

3. The compilation and delineation of this survey has been done without prior field inspection. It is not possible in the office to distinguish whether the shoreline is slightly above or below high water. For this reason, upon the receipt of subsequent field inspection it may be necessary to revise the shoreline.

4. With further reference to paragraph 1, the ground control was approximately identified on the photographs in the office rather than the accepted method of field identification on the photographs. Wherever possible the ground control should be identified on the photographs in the field. Should the field identification of the control show any misidentification, this information should be sent to the Washington Office so that the compilation can be corrected.

5. Contours at 1000 foot intervals were drawn on this compilation. There were 21 known vertical control stations available from surveys T-4311, T-4835, T-4836, and H-4730. Using the above elevations and the stereoscope floating dot parallax method, enough additional elevations were determined to sketch in the above contours to an approximate accuracy of ± 100 feet.
6. Numerous elevations of peaks have been shown on this survey, but only those that are underlined were determined from air photo parallax measurements; the other elevations were taken from the existing planitable surveys.

7. The shoreline of Montague Strait was traced from T-4836, 1:20,000, 1933 survey. The shoreline from Box Point north was traced from T-4835, 1:20,000, 1933 survey. Only elevations were used in the compilation of this survey from T-4311, 1:20,000 and H-4730, 1:60,000.

8. The accuracy of shoreline details is believed to be from 0.0 mm to 2.0 mm.

9. Reference Station - Valdez datum

    River 1933  Lat.  59°54'32.70" (1012.0 M)
    Long.  147°30'17.16" (266.7 M)

Radial plot by Harvey F. Nelson

Compiled by Harvey F. Nelson

L. C. Landis

Note: This sheet was compiled at request of the nearest chief.

March 25, 1943, photometric field survey are contemplated at present.

R. G. Jones
<table>
<thead>
<tr>
<th>Name on Survey</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
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<tr>
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<td>056-B</td>
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</table>

Names underlined in red are approved. 10-12-49
L. Heck
DIVISION OF PHOTOGRAMMETRY
REVIEW REPORT OF
TOPOGRAPHIC MAP MANUSCRIPT T-8470

Subject numbers not used in this report have been adequately covered in other parts of the Descriptive Report.

26. Control:

Horizontal control data form H-2388-12 listing all triangulation stations, within the limits of the map manuscript, on the Valdez Datum (unadjusted) is attached to the descriptive report.

Triangulation Station Sept. 1933 falls north of the map manuscript off the limits of the sheet.

In addition to the triangulation stations listed in Paragraph No. 2 of the Radial Plot - Compilation Report, triangulation stations Ridge, 1933 and Ground, 1933 (mountain peaks) and Ledge, 1933 (an offshore rock) can be considered held by the radial plot.

Triangulation station Round, 1933 (Peak, 3202 Ft.) falls on a slope at a photogrammetric elevation of approximately 2200 feet. The geodetic elevation was obtained from one Z.D. observation from station Zaikof, 1933, the line falling across many peaks along the backbone of the island. The highest photogrammetric elevation in this vicinity is 3050 feet for triangulation station Ground, 1933 (Peak). It was impossible to hold the position of station Round, 1933 in the radial plot, so it is believed that two different mountain peaks were observed to obtain the position for this station. These data have been transmitted to the Division of Geodesy on form 526, RECOVERY NOTE, (PHOTOGRAMMETRIC) TRIANGULATION STATION.

Spot Elevation 2648 was added to the map manuscript from T-4836 (1933).

28. Detailing:

The final review corrections and changes were made on the map manuscripts.

Fish Island and vicinity was redetailed to make triangulation station Isle, 1933 fall on the island in accordance with its description. The radial plot position of photo center 14058-11 was moved 1.3 mm south to accomplish this.

The delineation of shoreline and offshore rocks was examined and compared with H-5460 (1933, 1:20,000 scale), north of Box Point, and H-4730 (1927 and 1928, 1:60,000 scale), Jeanie Cove to Fish Island, and is believed to be as accurate as possible without field inspection of photographs. The dashed line limiting the shoal and shallow areas is generally on the "safe" side.
The contours were examined and compared with the photographs by stereoscopic methods. Good junctions are not obtained in areas common to T-4836 (1933, 1:20,000 scale) and T-4311 (1927, 1:20,000 scale) where contours, or form lines, were located by field methods, but the contours as shown on the map manuscripts appear to be in agreement with the photographs.

37. Geographic Names: 

All geographic names shown on the map manuscripts have been approved by the Geographic Names Section of the Division of Charts. Attached to the Descriptive Report is a list of approved geographic names.

47. Adequacy of Compilation:

An examination of map manuscripts T-8470 N/2 and T-8470 S/2 indicates it to be complete as a base map for nautical charts and hydrographic surveys. It is not recommended that it be incorporated into standard quadrangle maps until such time as the usual field inspection or verification becomes available.

Reviewed by:
Gordon S. Willey
11 Oct. 1949

Approved by:
G. Jones
Tech. Asst. to Chief, Div. of Photogrammetry

Under the direction of:

Chief, Div. of Photogrammetry

Chief, Nautical Chart Branch
Division of Charts