

8470

Diag. 'd. on Diag. Ch. No. 8551-2

Form 504

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

194 3

CHIEF OF PARTY

L. C. Lande

LIBRARY & ARCHIVES

DATE December 20, 1949

B-1870-1 (1)

8470

DATA RECORD

T-8470

Quadrangle (II):

Project No. (II): None

Field Office:

Chief of Party:

Compilation Office: Wash., D.C. Chief of Party: L. C. Lande

Instructions dated (II III): None

Copy filed in Descriptive
Report No. T- (VI)

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):

MHW = shoreline
MSL = contours

Reference Station (III):

RIVER 1933

G-1707, p. 3

Lat.:

Long.:

~~Adjusted~~
Unadjusted

State Plane Coordinates (VI):

X =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
14057	6-8-43	12.05	1:20,000	
14058(1-15)				

Tide from (III):

Mean Range:

Spring Range:

Camera: (Kind or source) nine-lens

Field Inspection by: none

date:

Field Edit by: none

date:

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

Projection and-Grids ruled by (III) Wash. Office

date: Dec. 1943

" " " checked by: Wash. Office

date: Dec. 1943

Control plotted by: Harvey F. Nelson

date: Dec. 1943

Control checked by: Gordon B. Willey

date: Sept. 1949

Radial Plot by: Harvey F. Nelson

date: Jan. 1943

Detailed by: Harvey F. Nelson

date: Feb. 1943

Reviewed in compilation office by:

date:

^{Manuscript}
Elevations on ~~Field Edit Sheet~~

checked by: G. B. Willey

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 plot: None

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. Willey
October 1949

C
O
P
Y

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:

Sept	Nat	Squeeze	Isle
Ate	Dub	River	Shirt
Dome	Box	Pointed Rock	

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 plane-table 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. Lande
L. C. Lande

*Note This sheet was compiled
at request of the Nautical Chart
Branch. No photogrammetric field
surveys are contemplated at present.*
B. J. Jones

GEOGRAPHIC NAMES

Survey No. T-8470

GEOGRAPHIC NAMES																	
Survey No. T-8470																	
Name on Survey	On Chart No.										On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List
	A	B	C	D	E	F	G	H	K								
<u>MONTAGUE ISLAND</u>																US&D	1
<u>MONTAGUE STRAIT</u>																	2
<u>PATTON BAY</u>																US&D	3
<u>BOX POINT</u>																"	4
<u>BOX ISLAND</u>																	5
<u>JEANIE COVE</u>																"	6
<u>JEANIE POINT</u>																"	7
<u>WOODED ISLANDS</u>																US&D	8
<u>TANKER ISLAND</u>																"	9
<u>FISH ISLAND</u>																	10
<u>BEACH RIVER</u>																	11
<u>NELLIE MARTIN RIVER</u>																	12
																	13
																	14
																	15
																	16
<u>Alaska</u>																	17
<u>Prince William Sound</u>																US&D	18
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Names underlined in red
are approved. 10-18-49
L. Heck

(for title)

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 M-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: 214✓

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 B. Willey
Gordon B. Willey 11 Oct. 1949

Under the direction of:

S. V. Griffith 26 Oct '49
Chief, Review Section

Approved by:

B. J. Jones 11/49
Tech. Asst. to Chief,
Div. of Photogrammetry

H. C. Edmundson
Chief, Nautical Chart Branch
Division of Charts

O. S. Reading
Chief, Div. of Photogrammetry

W. M. Seafelt
Chief, Div. of Coastal Surveys