

T-12662 ORIGINAL

T-12662

NOAA FORM 76-35	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT	
Type of Survey ..... Shoreline	
Job No. .... PH-6410	Map No. .... T-12662
Classification No. * Incomplete Edition No. ..1.....	
LOCALITY	
State ..... Alaska	
General Locality ..... Montague Island	
Locality .... Rocky Bay	
1964 TO 19	
REGISTRY IN ARCHIVES	
DATE .....	

☆ U.S. GOVERNMENT PRINTING OFFICE: 1974-762-901

\* CLASS III MANUSCRIPT

## DESCRIPTIVE REPORT - DATA RECORD

T - 12662

PROJECT NO. (II):

PH-6410

FIELD OFFICE (III):

None

CHIEF OF PARTY

PHOTOGRAMMETRIC OFFICE (III):

Atlantic Marine Center, Norfolk, Va.

OFFICER-IN-CHARGE

J. Bull, Director

INSTRUCTIONS DATED (II) (III):

Field	Aug. 21, 1964
Office	Feb. 8, 1965
Field	Feb. 18, 1965
Office, Amendment I	Feb. 19, 1965
Office, Amendment I to Feb. 19, 1965 Instructions	Feb. 26, 1965
Field	Apr. 2, 1965
Office	Dec. 6, 1965
Office Amendment I	Jan. 1966
Field	Mar. 15, 1966
Office Amendment I	Apr. 26, 1966

METHOD OF COMPILATION (III):

Kelsh Plotter

MANUSCRIPT SCALE (III):

1:20,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

1:6,000 pantographed to 1:20,000

DATE RECEIVED IN WASHINGTON OFFICE (IV):

DATE REPORTED TO NAUTICAL CHART BRANCH (IV):

APPLIED TO CHART NO.

DATE:

DATE REGISTERED (IV):

Aug 1978

GEOGRAPHIC DATUM (III):

N.A., 1927

VERTICAL DATUM (III): Mean High Water.

~~XXXXXXXXXX~~ EXCEPT AS FOLLOWS:

Elevations shown as (25) refer to mean high water

Elevations shown as (5) refer to sounding datum

i.e., ~~XXXXXXXXXX~~ mean lower low water

REFERENCE STATION (III):

Rocky 1933

LAT.:

60°21' 35.57" (1100.9M)

LONG.:

147°05' 37.75" (578.8M)

☒ ADJUSTED☐ UNADJUSTED

PLANE COORDINATES (IV):

STATE

ZONE

Y = 2,325,106 Ft.

X = 301,951 Ft.

Alaska

3

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  
T-12662

FIELD INSPECTION BY (II): <b>None</b>		DATE:
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):  <b>Air photo compilation - Aug. 15, 1964</b>  <i>NO MEAN LOWER LOW-WATER LINE IS DELINEATED ON THIS MAP.</i>		
PROJECTION AND GRIDS RULED BY (IV): <b>A. E. Roundtree</b>		DATE <b>11/65</b>
PROJECTION AND GRIDS CHECKED BY (IV): <b>R. S. Kornspan</b>		DATE <b>11/65</b>
CONTROL PLOTTED BY (III):  <b>K. G. Boyle, B. L. Barge</b>		DATE  <b>03/66</b>
CONTROL CHECKED BY (III):  <b>A. Santillan, B. Wilson</b>		DATE  <b>03/66</b>
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): <b>D. O. Norman</b>		DATE <b>11/65</b>
STEREOSCOPIC INSTRUMENT COMPILATION (III):  <b>Kelsh Plotter</b>	PLANIMETRY <b>K.G. Boyle, B.L. Barge, &amp; C. Blood</b> <b>REVIEWED: L.O. Neterer &amp; R.J.Pate</b>	DATE <b>05 &amp; 06/66</b> <b>05 &amp; 06/66</b>
	CONTOURS  <b>Inapplicable</b>	DATE
MANUSCRIPT DELINEATED BY (III):  <b>B. L. Barge</b>		DATE  <b>11/66</b>
SCRIBING BY (III):		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): <b>B. Wilson</b> <b>COMPILATION:</b> <b>FIELD EDIT:</b> <b>SCRIBING &amp; STICK-UP :</b>		DATE <b>1/68</b>
REMARKS:  <b>FIELD EDIT BY: FIELD EDIT CANCELLED</b>  <b>DATE August 6, 1975</b>		



FORM C&GS-181c  
(3-66)U.S. DEPARTMENT OF COMMERCE  
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION  
COAST AND GEODETIC SURVEY

## DESCRIPTIVE REPORT - DATA RECORD

T-12662

CAMERA (KIND OR SOURCE) (III):

U.S.C. &amp; G.S. Type "W"

## PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
64-W-1784 thru 1787	08/15/64	10:08	1:30,000	4.6 ft. above MLLW
64-W-1837	08/15/64	10:38	1:30,000	4.3 ft. above MLLW
64-W-1842 thru 1844	08/15/64	10:49	1:30,000	4.2 ft. above MLLW

## PREDICTED TIDE (III)

## DIURNAL

	RATIO OF RANGES	MEAN RANGE	EXCESS RANGE
REFERENCE STATION: Cordova, Alaska		10.0	12.4
SUBORDINATE STATION: Port Chalmers, Alaska		9.3	11.7
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV):

DATE:

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): 2

RECOVERED:

2

IDENTIFIED:

2

NUMBER OF BM(S) SEARCHED FOR (II):

None

RECOVERED:

None

IDENTIFIED:

None

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

None

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

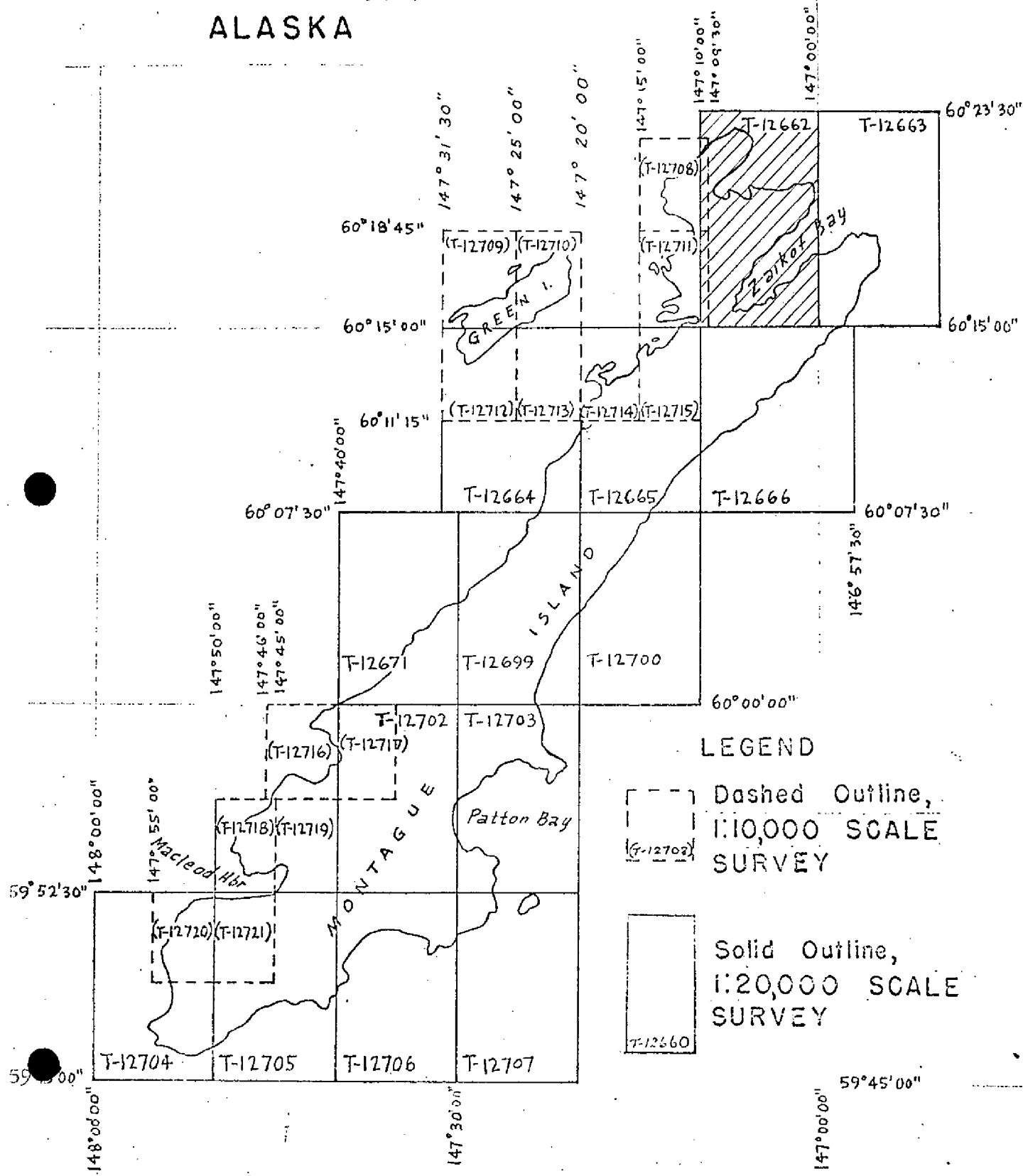
None

REMARKS:

T-12662

COMPILATION RECORD	COMPLETION DATE	REMARKS
Compilation complete pending field edit.	11/68	Incomplete manuscript
Field edit cancelled.	8/06/75	Incomplete manuscript
Final Review	<del>7/77</del> 6/77	Class III manuscript
A FEW CORRECTIONS WERE MADE PRIOR TO REGISTRATION.	TO MARINE CHARTS 6/8/78	1

JOB PH-6410  
 SHORELINE MAPPING  
 SCALE, 1:10,000 - 1:20,000  
 MONTAGUE ISLAND  
 ALASKA



SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORTS

T-12662 through T-12666, T-12671, T-12699,  
T-12700 and T-12702 through T-12721

Project PH-6410 was originally designated 21423 (3). It consists of fourteen maps at 1:10,000 scale and fourteen maps at 1:20,000 scale. Its purpose was to provide up-to-date shoreline for hydrography and for nautical chart construction. Map T-12701, 1:20,000 scale, originally a part of the project, was cancelled.

This project covers Montague Island, Green Island and Little Green Island bordered by Prince William Sound and the Gulf of Alaska. The area was significantly affected by the earthquake of March 27, 1964. Uplifts of as much as 32 ft. have been recorded. This action created new shoreline and alongshore features. The new features, in many instances, appear to be composed of loosely consolidated materials. The configuration of some features as recorded on the August, 1964 photographs could have changed significantly since photography as a result of natural weathering and settling forces.

Photograph coverage was not sufficient to allow the delineation of two previously charted offshore islands at lat.  $60^{\circ} 06.7'$ , long.  $147^{\circ} 36.1'$  (THE NEEDLE) and lat.  $60^{\circ} 11.9'$ , long.  $147^{\circ} 27.1'$  and a rock at lat.  $60^{\circ} 17.3'$ , long.  $147^{\circ} 28.0'$ . All three of which lie within the project limits.

Field work prior to compilation was limited to the recovery establishment and identification of horizontal control necessary for bridging.

The original project, designated 21423(3), was bridged at the Washington Science Center by analytic methods in February, 1965. This bridge did not yield a sufficiently satisfactory solution and resulted in a Preliminary Classification for all compilation derived from it. This compilation took place at the Portland Photogrammetric Office during March and April, 1965. All preliminary data including the base maps and ratio photography was later destroyed.

Incomplete maps were produced at the Atlantic Marine Center from a new bridge run in November, 1965. Compilation was by Kelsh instrument and graphic methods.

Details were delineated on the north margins of T-12716 and T-12718. This was necessary because of a lack of map coverage in these areas.

Map T-12701, a 1:20,000 scale map, was cancelled.

A partial field edit was done on maps T-12671 and T-12699 in May 1975. A complete edit was done for the details shown on T-12664 at the same time. Field edit was cancelled for all the remaining maps in the project. However, the field editor did give the height of three rocks and the identification of a small gravel beach area on T-12714, which was applied.

Final review was performed at the Atlantic Marine Center. The original base manuscripts were forwarded to the Rockville office in September, 1977 for final registration.



T-12662  
FIELD INSPECTION REPORT

There was no field inspection prior to office compilation.

Photogrammetric Plot Report No. 2  
Montague Island, Alaska  
PH-6410  
November 1965

This report supersedes the plot report on Montague Island dated February 1965.

21. Area Covered

This report pertains to Montague and Green Islands, Alaska (Zone 3). The sheets covered are T-12660 through T-12666, T-12671 and T-12699 through T-12721.

22. Method

Four strips were bridged by analytic aerotriangulation. Three of the strips had been bridged in January 1965, but the control furnished at that time was inadequate. New control has since been furnished and it was necessary to remeasure only the models in which the new control appeared.

Strips #1, #3, and a strip covering Green Island were adjusted to ground in the normal manner. Strip #2 was adjusted to ground with common points transferred from Strip #1. Common points were also transferred from Strip #1 to the 1:30,000 scale photography that is to be used by compilation. The common points are 180 micron drill holes and there are four per model.

23. Adequacy of Control:

The new control was adequate, however, it was not possible to identify the sub-points of RIVER 2, 1955, or VIC, 1933, on the bridging photography. The use of these stations was not necessary for a satisfactory adjustment.

Sub-point "A" of JUAN, 1965, would not hold with its companion station, sub-point "B". Each sub-point was used in a preliminary straight line adjustment of the strip and sub-point "B" was found to fit well with the other control stations in the strip, while sub-point "A" was so far out of line that we strongly suspect a misidentification.

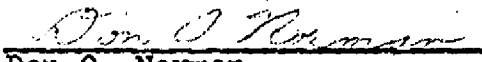
24. Supplemental Data

Approximate elevations were taken from U.S.G.S. topographic quadrangles to satisfy the requirements of the horizontal-vertical strip adjustment program.


25. Photography

The photography was adequate.

Respectfully submitted:

  
Don O. Norman

Approved and forwarded:

  
Henry P. Eichert  
Acting Chief, Aerotriangulation Section

## Fit to Control (feet)

STRIP #1

▲ used in adjustment

△ used as check

JUAN, 1965  
 ▲ sub station "A" -45.1 +23.9  
 ▲ sub station "B" - 1.0 - 0.1  
 CLOUD, 1933  
 △ sub station "A" + 8.8 + 5.5  
 ▲ sub station "B" + 1.1 + 1.3  
 CUB, 1933  
 △ sub station "A" - 7.0 + 1.9  
 ▲ sub station "B" + 1.5 - 3.7  
 PERCH, 1933 RM #3  
 ▲ sub station "A" - 1.9 + 0.1  
 △ sub station "B" -00.2 - 1.1  
 LAGOON, 1933  
 ▲ sub station "A" - 0.2 + 3.0  
 △ sub station "B" + 3.6 +11.9  
 WHITE, 1902  
 △ sub station "A" +14.0 + 5.2  
 ▲ sub station "B" + 0.5 - 0.9

## STRIP #2 (adjusted on tie points from Strip #1)

▲ 14401 +0.4 -0.3  
 ▲ 14402 -0.8 +0.8  
 ▲ 14403 +0.9 -1.2  
 ▲ 14404 -0.4 +0.4

## STRIP #3

ROCKY, 1933  
 △ sub station "A" - 2.0 - 2.0  
 ▲ sub station "B" 0.0 0.0  
 GRAVE, 1933  
 ▲ sub station "A" 0.0 0.0  
 △ sub station "B" - 1.8 - 1.0  
 STORK, 1933  
 △ direct + 2.1 - 1.6  
 ▲ sub station + 0.1 0.0

## GREEN ISLAND

TREY, 1933  
 ▲ sub station "A" 0.0 0.0  
 △ sub station "B" - 0.3 + 1.6

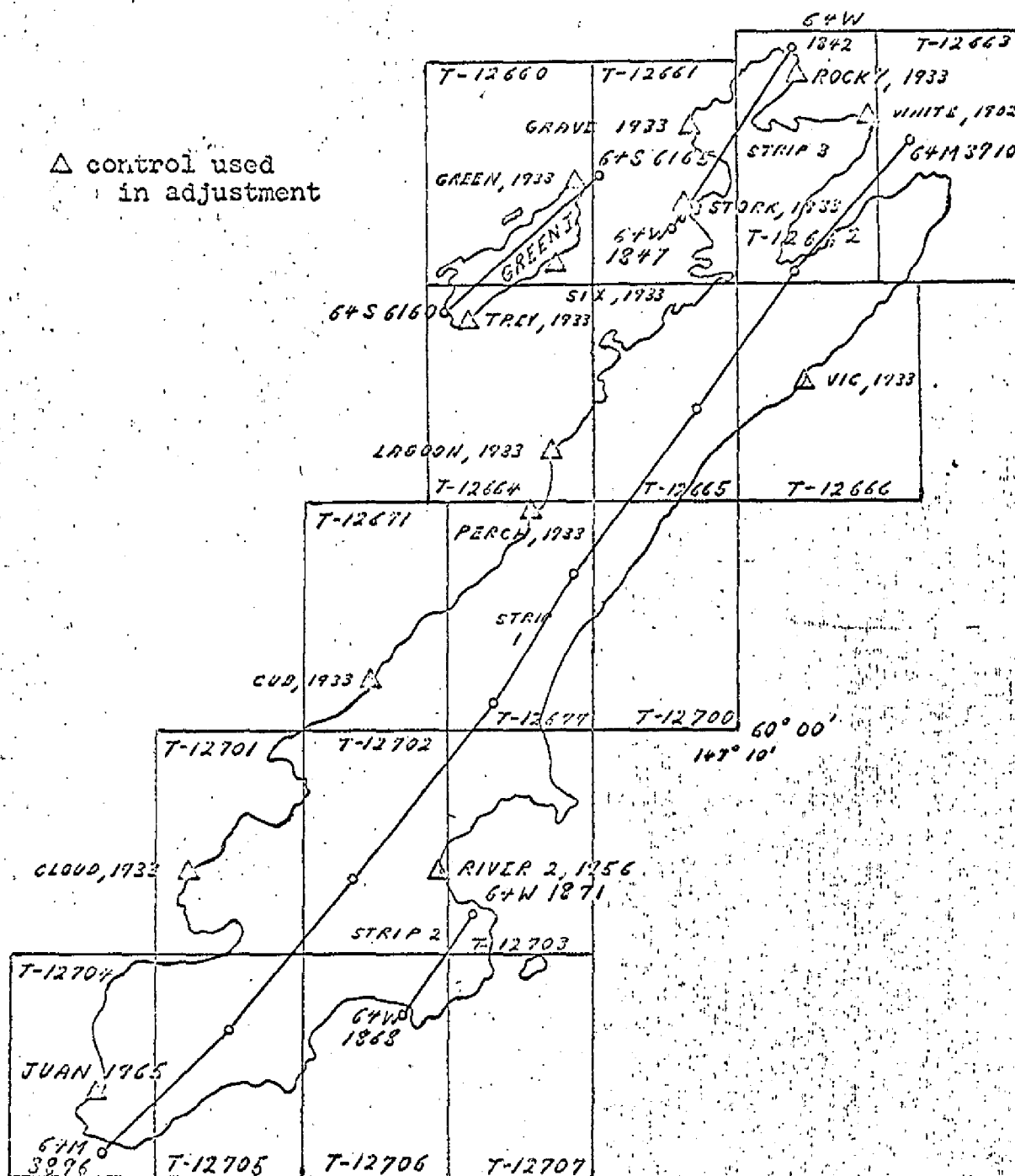
## SIX, 1933 RM #2

△ sub station "A" - 1.9 + 0.6  
 ▲ sub station "B" 0.0 0.0  
 GREEN, 1933  
 ▲ sub station "A" 0.0 0.0  
 △ sub station "B" - 0.4 + 2.4



AEROTRIANGULATION SKETCH  
MONTAGUE ISLAND  
PH-6410  
November, 1965

△ control used  
in adjustment



1. *...*

None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS ( <i>1 Ft.</i> = <i>3048006 meter</i> ) <div style="text-align: right;">FORWARD      (BACK)</div>	
/ Rocky 1933	60147 P. 21 Vol. 6, P. 321	N.A. 1927	60 21 35.57 147 05 37.75	1100.9 (756.1) 578.8 (341.2)	
/ White 1902	60147 P. 25 Vol. 6, P. 313	N.A. 1927	60 20 39.477 147 00 04.379	1221.8 (635.2) 67.2 (853.2)	
COMPUTED BY B. L. Barge	DATE 10/20/66	CHECKED BY A. I. Shands COPIED: B. Wilson	DATE 01/12/68 10/25/66		

COMPILATION REPORT  
T-12622

31. DELINEATION:

The Kelsh Plotter and graphic methods were used. The area in the vicinity of Middle Point and to the southwest of Middle Point to about latitude  $60^{\circ} 18'$  was delineated monoscopically because of cloud obstructions and inadequate overlap between photos 64-W-1783 and 64-W-1785.

The area between longitude  $147^{\circ} 09' 30''$  and  $148^{\circ} 10' 00''$ <sup>7 A.L.S.</sup> is a tracing from a photo-reduction of 1:10,000 scale T-12708 and T-12711.

32. CONTROL:

See the PHOTOGRAMMETRIC PLOT REPORT, herewith.

33. SUPPLEMENTAL DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours are inapplicable. Drainage was delineated from office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS:

All details were delineated from office interpretation of the photographs.

36. OFFSHORE DETAILS:

See Item 35.

37. LANDMARKS AND AIDS:

None

38. CONTROL FOR FUTURE SURVEYS:

None

39. JUNCTIONS:

Junctions have been made with:

T-12708 and T-12711 (1:10,000) to the west.

T-12663 to the east.

T-12666 to the south.

There is no contemporary survey to the north.

40. HORIZONTAL AND VERTICAL ACCURACY:

No Statement.

46. COMPARISON WITH EXISTING MAPS:

Comparison has been made with U.S. Geological Survey quadrangle SEWARD (B-1), ALASKA, Scale 1:63,360, 1951, minor revisions 1963. The two maps are in fair agreement.

47. COMPARISON WITH NAUTICAL CHARTS:

Comparison has been made with nautical chart Number 8520, Scale 1:80,000, Twelfth Edition, July 20, 1964.



T-12662

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

*Albert C. Rauck, Jr. for*  
B. L. Barge  
Cartographic Technician

Approved:

*Albert C. Rauck, Jr.*  
Albert C. Rauck, Jr.  
Chief, Coastal Mapping Section

July 12, 1977

## GEOGRAPHIC NAMES

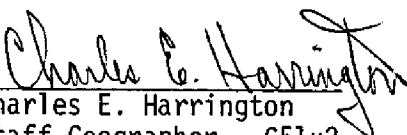
## FINAL NAME SHEET

PH-6410 (Montague Island, Alaska)

T-12662

Middle Point ✓  
Montague Island ✓  
Montague Point ✓  
Prince William Sound ✓  
Rocky Bay ✓  
Stockdale Harbor ✓  
Zaikof Bay ✓

Approved by:

  
Charles E. Harrington  
Staff Geographer - C51x2



## REVIEW REPORT

T-12662

## SHORELINE

June 21, 1977

61. GENERAL STATEMENT:

See Summary ~~which is~~<sup>ON</sup> Pages 6a and 6b of this Descriptive Report.

The 1:20,000 scale ratio photographs used in the compilation of this map (64 W 1784 - 1787, 64 W 1837, and 64 W 1842 - 1844) were not with the project data forwarded to Final Review. They are considered lost.

This map is overlapped on the western edge for 30 seconds by two 1:10,000 scale maps (T-12708 and T-12711). Details in the overlap area were transferred to this map from the 1:10,000 scale maps prior to final review.

No field edit was performed within the limits of this map.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Comparison was made with T-2612, 1:40,000 scale, dated 1902.

The shoreline shown on T-2612 has the same general shape as that shown on T-12662. However, the shoreline on T-2612 falls consistently to the southeast of that shown on T-12662. T-2612 is on the Valdez Datum.

The effects of the 1964 earthquake are most evident at Montague Point and the heads of Rocky Bay and Zaikof Bay. In these flat areas, the shoreline has been altered considerably. Kelp mapped off Montague Point and Middle Point is not visible on the contact photos covering these areas.

~~In the area compared, T-12662 supersedes T-2612 for nautical chart construction purposes.~~ A.L.S.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A comparison was made with USGS Quadrangle SEWARD (B-1), ALASKA, 1:63,360 scale, dated 1951, revised 1963.



The shoreline is in good general agreement. However, the effect of the 1964 earthquake was to extend the shoreline seaward at the head of Zaikof Bay and Rocky Bay and to raise previously submerged rocks, which enlarged ledge and reef areas and created a new island off Montague Point.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

No contemporary hydrographic surveys were conducted in the area.

65. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Chart 16709, 1:80,000 scale, 17th edition, dated November 26, 1976.

See Paragraph 62 concerning placement of the shoreline. As stated in Paragraph 63, the differences noted in the shoreline and some offshore features can be attributed to the earthquake.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This map complies with the Project Instructions and meets the requirements for Bureau Standards and the National Standards of Map Accuracy.

Submitted by:

*A. L. Shands*

A. L. Shands  
Final Reviewer

Approved for forwarding:

*Joseph W. Vonasek*

Joseph W. Vonasek  
Chief, Photogrammetric Branch, AMC

Approved:

*John D. Perrow Jr.*

Chief, Photogrammetric Branch

*James C. Otter*

Chief, Coastal Mapping Division