

T-12703

ORIGINAL

T-12703

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-12703
Classification No. * Incomplete Edition No. 1

LOCALITY

State Alaska
General Locality Montague Island
Locality Patton Bay

1964 TO 19

REGISTRY IN ARCHIVES

DATE

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

* CLASS III MANUSCRIPT

DESCRIPTIVE REPORT - DATA RECORD

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PROJECT NO. (i):

PH-6410

FIELD OFFICE (ii):

None

CHIEF OF PARTY

PHOTOGRAMMETRIC OFFICE (iii):

Atlantic Marine Center, Norfolk, Virginia

OFFICER-IN-CHARGE

J. Bull - Director

INSTRUCTIONS DATED (iii) (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 and graphic

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):

NA, 1927

VERTICAL DATUM (iii):

MHW

~~MEAN LOW WATER~~ EXCEPT AS FOLLOWS:

Elevations shown as (25) refer to mean high water

Elevations shown as (5) refer to sounding datum

i.e., ~~MEAN LOW WATER~~ mean lower low water

REFERENCE STATION (iii):

RIVER 2, 1956

LAT.:

LONG.:

59° 54' 43.381" (1342.6M)

147° 29' 47.742" (742.0M)

☒ ADJUSTED☐ UNADJUSTED

PLANE COORDINATES (iv):

STATE

ZONE

y = 2,162,883.50 ft. x = 225,323.04 ft.

Alaska

3

ROMAN NUMERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (iii) FIELD PARTY, (iiii) 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

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FIELD INSPECTION BY (III): None		DATE:
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Air photo compilation - August 15, 1964 <i>NO MEAN LOWER LOW-WATER LINE IS DELINEATED ON THIS MAP.</i>		
PROJECTION AND GRIDS RULED BY (IV): A. E. Roundtree		DATE 3/17/66
PROJECTION AND GRIDS CHECKED BY (IV): R. Glaser		DATE 3/22/66
CONTROL PLOTTED BY (III): C. E. Blood		DATE 3/30/66
CONTROL CHECKED BY (III): L. O. Neterer, Jr.		DATE 3/30/66
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): D. O. Norman		DATE 11/65
STEREOSCOPIC INSTRUMENT COMPILATION (III): Kelsh Plotter		PLANIMETRY B. Wilson REVIEWED: { L. O. Neterer, Jr. A. C. Rauck, Jr. DATE 12/68 & 1/69 12/68 & 1/69
CONTOURS Inapplicable		DATE
MANUSCRIPT DELINEATED BY (III): B. Wilson		DATE 1/17/69
SCRIBING BY (III):		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): COMPILATION: R. J. Pate		DATE 2/69
REMARKS: FIELD EDIT CANCELLED 8/06/75		

DESCRIPTIVE REPORT - DATA RECORD

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CAMERA (KIND OR SOURCE) (III):

USC&GS Type "W"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
64W-1870 and 1871	8/15/64	11:10	1:30,000	4.0 ft. above MLLW
64W-1874 and 1875	8/15/64	11:10	1:30,000	4.0 ft. above MLLW
64W-1823 and 1824	8/15/64	10:26	1:30,000	4.1 ft. above MLLW

Predicted TIDE (III)

DIURNAL

	RATIO OF RANGES	MEAN RANGE	MEAN RANGE
REFERENCE STATION: Cordova, Alaska		10.0	12.4
SUBORDINATE STATION: Patton Bay, Alaska		7.9	10.2
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV):

DATE:

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): 6

RECOVERED:

6

IDENTIFIED:

3

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-12703

COMPILATION RECORD	COMPLETION DATE	REMARKS
Compilation complete pending field edit.	2/69	Incomplete manuscript
Field edit cancelled.	8/06/75	Incomplete manuscript
Final Review	7/77	Class III manuscript
A FEW CORRECTIONS WERE MADE PRIOR TO REGISTRA- TION.	TO MARINE CHARTS 6/8/78	"

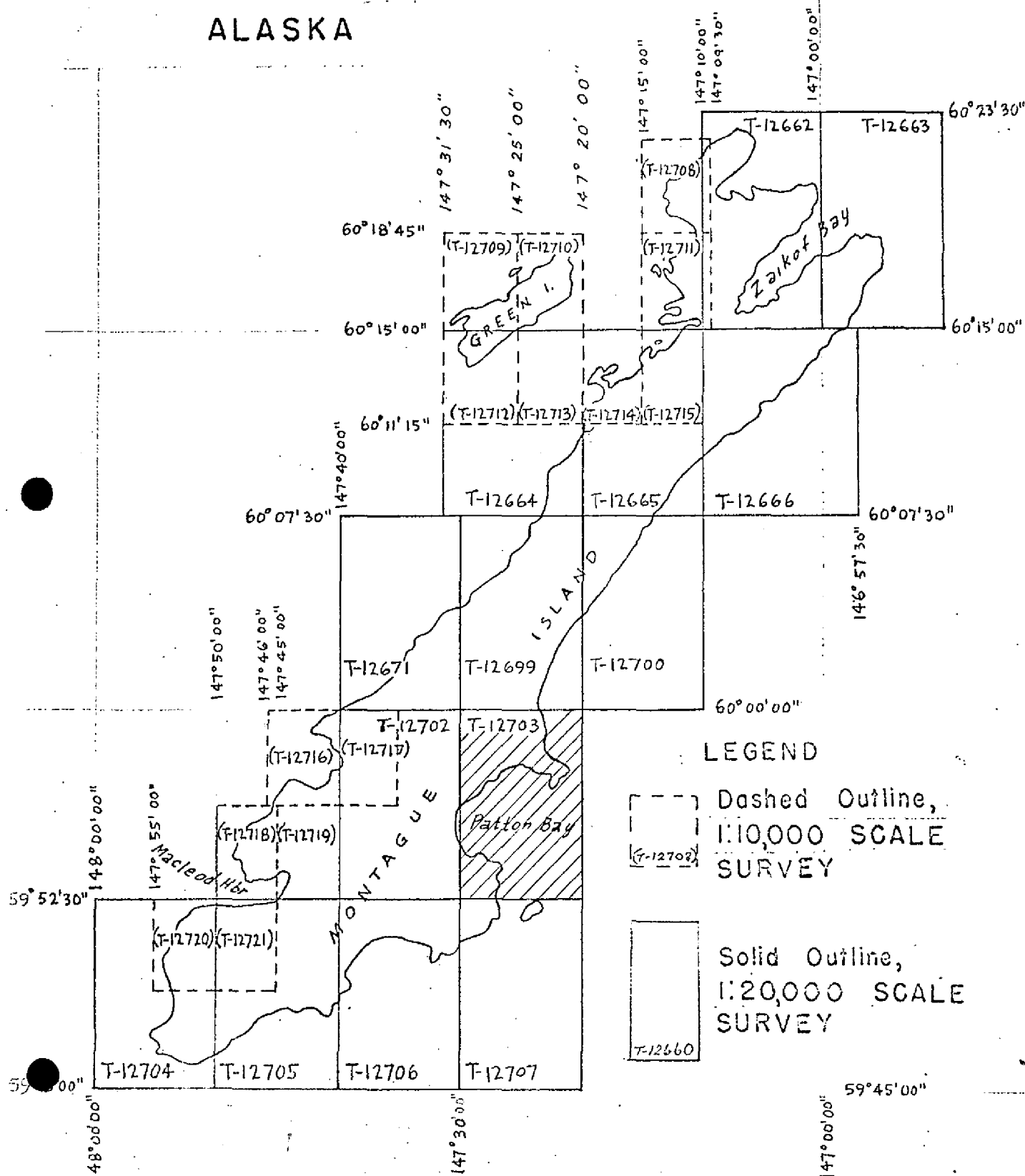
JOB PH-6410

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.

FIELD INSPECTION REPORT

T-12703

There was no field inspection prior to 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.

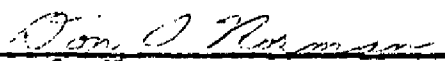
24. Supplemental Data

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

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

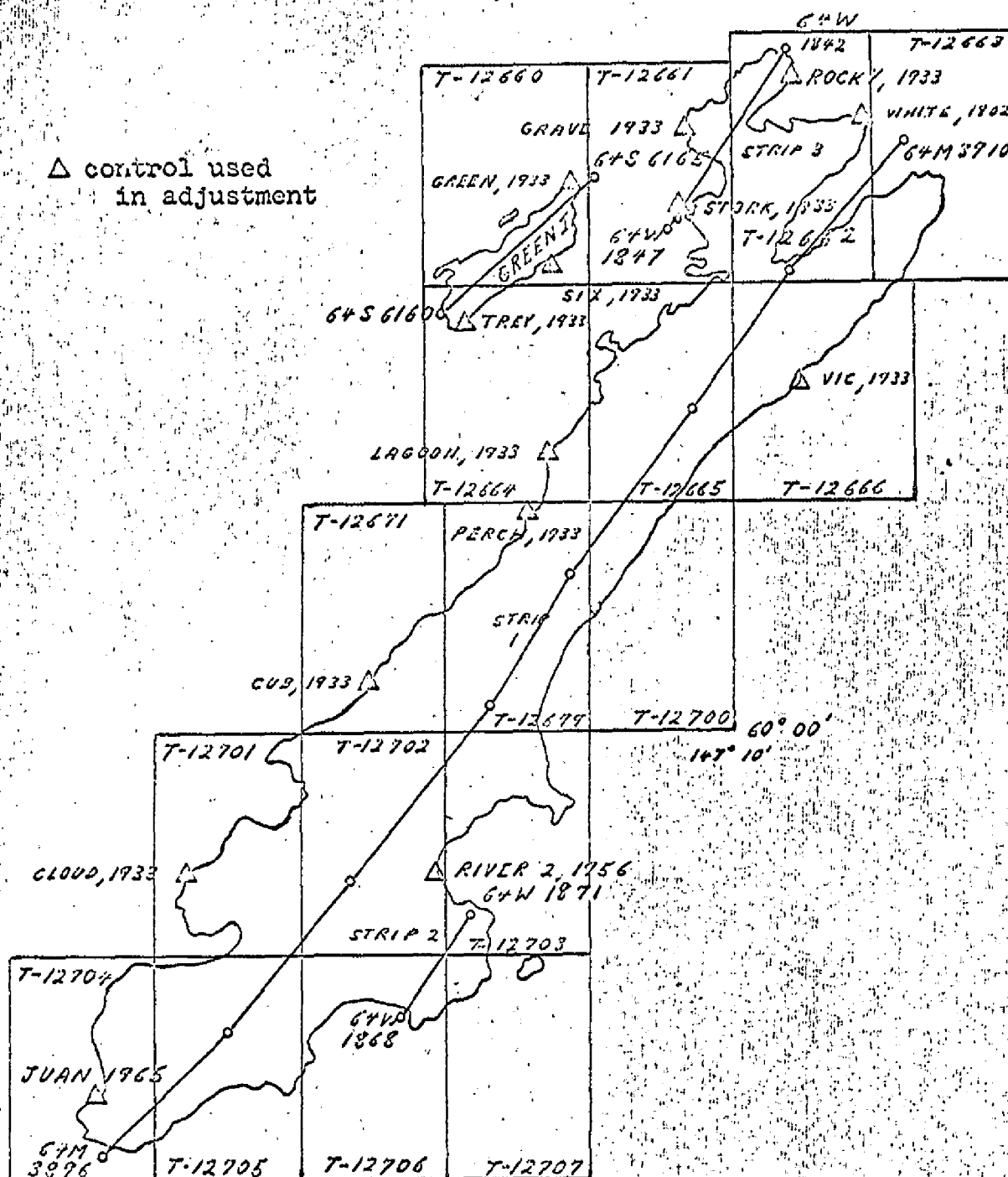
TREY, 1933
 ▲ sub station "A" 0.0 0.0
 ▲ sub station "B" - 0.3 + 1.6

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



COMPILATION REPORT

T-12703

31. DELINEATION:

The Kelsh Plotter was used except that certain areas covered by models that could not be oriented with the Kelsh were done graphically. These areas were: (1) the WOODED ISLANDS along the south limit of the map and east of Longitude 147° 25', (2) the NE tip of the major point of the land mass of the SW quarter of the manuscript, and (3) the area from Latitude 59° 59' north to the 60° line. There was only monoscopic coverage (with the ratio photos) of small parts of each of these areas; nevertheless, the photography and the compilation is believed to be satisfactory.

As usual some of the details were not completed with the Kelsh but graphically.

32. CONTROL:

See Photogrammetric Plot Report No. 2, herewith, dated November, 1965.

33. SUPPLEMENTAL DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours-inapplicable.

Drainage-see item 31.

35. SHORELINE AND ALONGSHORE DETAILS:

See Item 31.

36. OFFSHORE DETAILS:

See Item 31.

37. LANDMARKS AND AIDS:

None.

38. CONTROL FOR FUTURE SURVEYS:

. None.

39. JUNCTIONS:

Satisfactory junctions have been made with:
T-12699 to the north.
T-12702 to the west..
T-12707 to the south.

There is no contemporary survey of the water area to the east, so the compilation in 2 places extends beyond the "neat line".

40. HORIZONTAL AND VERTICAL ACCURACY:

No statement.

41. COMPARISON WITH HYDROGRAPHIC SURVEYS:

Comparison has been made with H-5460 dated 1933, on Valdez Datum, scale 1:20,000 and with H-8312 dated 1956 and 1957, on NA 1927 datum, scale 1:20,000.

46. COMPARISON WITH EXISTING MAPS:

Comparison has been made with USGS Quadrangle BLYING SOUND (D-1 and D-2), ALASKA, dated 1953, scale 1:63,360.

47. COMPARISON WITH NAUTICAL CHARTS:

Comparison has been made with Chart 8515, scale 1:81,436, published Nov. 1935 (7th edition) revised to 2/14/49.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

Albert C. Rauck, Jr. For.
B. Wilson
Cartographic Technician

Approved:f

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

July 12, 1977

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6410 (Montague Island, Alaska)

T-12703

Box Island ✓

Box Point ✓

Fish Island ✓

Gulf of Alaska ✓

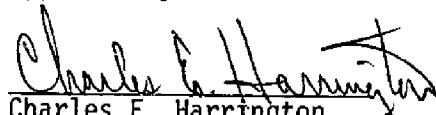
Montague Island ✓

Nellie Martin River ✓

Patton Bay ✓

Wooded Islands ✓

Approved by:


Charles E. Harrington
Staff Geographer - C51x2

FORM C&GS-1002
(9-66)U.S. DEPARTMENT OF COMMERCE
ESSA
COAST AND GEODETIC SURVEY

PHOTOGRAMMETRIC OFFICE REVIEW

T-12703

1. PROJECTION AND GRIDS RJP	2. TITLE RJP	3. MANUSCRIPT NUMBERS RJP	4. MANUSCRIPT SIZE RJP
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY RJP	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) NA		7. PHOTO HYDRO STATIONS NA
8. BENCH MARKS NA	9. PLOTTING OF SEXTANT FIXES NA	10. PHOTOGRAMMETRIC PLOT REPORT RJP	11. DETAIL POINTS RJP
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE RJP	13. LOW-WATER LINE RJP	14. ROCKS, SHOALS, ETC. RJP	15. BRIDGES RJP
16. AIDS TO NAVIGATION RJP	17. LANDMARKS RJP	18. OTHER ALONGSHORE PHYSICAL FEATURES RJP	19. OTHER ALONGSHORE CULTURAL FEATURES RJP
PHYSICAL FEATURES			
20. WATER FEATURES RJP		21. NATURAL GROUND COVER NA	22. PLANETABLE CONTOURS NA
23. STEREOSCOPIC INSTRUMENT CONTOURS NA	24. CONTOURS IN GENERAL NA	25. SPOT ELEVATIONS NA	26. OTHER PHYSICAL FEATURES RJP
CULTURAL FEATURES			
27. ROADS RJP	28. BUILDINGS RJP	29. RAILROADS RJP	30. OTHER CULTURAL FEATURES RJP
BOUNDARIES			
31. BOUNDARY LINES NA		32. PUBLIC LAND LINES NA	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES RJP		34. JUNCTIONS RJP	35. LEGIBILITY OF THE MANUSCRIPT RJP
36. DISCREPANCY OVERLAY RJP	37. DESCRIPTIVE REPORT RJP	38. FIELD INSPECTION PHOTOGRAPHS NA	39. FORMS RJP
40. REVIEWER <i>Albert C. Rauck, Jr. FOR.</i> R. J. Pate		SUPERVISOR, REVIEW SECTION OR UNIT <i>Albert C. Rauck, Jr.</i> A. C. Rauck, Jr.	
41. REMARKS (See attached sheet)			
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 CANCELLED 8/06/75			

REVIEW REPORT

T-12703

SHORELINE

July 21, 1977

61. GENERAL STATEMENT:

See Summary, ^{cn}which is Pages 6a and 6b of this Descriptive Report. No field edit was performed.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Comparison was made with a copy of T-8470, 1:20,000 scale, compiled on the Valdez Datum from photography dated June 1943. Fish Island and Box Island are now plotted about 100 meters east of the positions shown on T-8470. The shoreline of Montague Island shown on T-12703 is consistently seaward of that shown on T-8470. This difference is attributed to the effects of the 1964 earthquake.

~~T-12703 supersedes T-4870 for nautical chart construction purposes in those areas where comparison was made. A.L.S.~~

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

Comparison was made with USGS Quadrangle BLYING SOUND (D-1 and D-2), ALASKA, 1:63,360 scale, dated 1953. The entire shoreline shown on T-12703 was observed to be seaward of that shown on the quadrangle.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

No contemporary hydrographic surveys were conducted within the limits of this map.

65. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Chart 16701, 1:80,000 scale, 11th edition, dated March 10, 1973. The shoreline shown on the chart is consistently inshore of that shown on T-12703. This area was uplifted by the 1964 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: ^{SW}

John D. Perron Jr. *James L. ...*
Chief, Photogrammetric Branch Chief, Coastal Mapping Division