

T-12716

ORIGINAL

T-12716

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-12716
Classification No. * Incomplete Edition No. ... 1

LOCALITY

State Alaska
General Locality Montague Island
Locality Hanning Bay, West

1964 TO 19

REGISTRY IN ARCHIVES

DATE

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

* CLASS III MANUSCRIPT

DESCRIPTIVE REPORT - DATA RECORD
T-12716

PROJECT NO. (II):

PH-6410

FIELD OFFICE (III):

None

CHIEF OF PARTY

PHOTOGRAMMETRIC OFFICE (III):

Atlantic Marine Center, Norfolk, Virginia

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):

1:10,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

1:6,000 pantographed to 1:10,000

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

~~XXXXXXXXXX~~ 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 or mean lower low water

REFERENCE STATION (III):

HANNING 2, 1927

LAT.:

LONG.:

59° 59' 07.106" (219.9 M)

147° 42' 06.079" (94.3 M)

☒ ADJUSTED☐ UNADJUSTED

PLANE COORDINATES (IV):

STATE

ZONE

y = 2,190,561.66 ft. x = 188,374.81 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

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FIELD INSPECTION BY (II): 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 9/20/65
PROJECTION AND GRIDS CHECKED BY (IV): R. Glaser		DATE 9/28/65
CONTROL PLOTTED BY (III): K. G. Boyle		DATE 3/26/66
CONTROL CHECKED BY (III): L. O. Neterer, Jr.		DATE 3/26/66
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): D. O. Norman		DATE 11/03/65
STEREOSCOPIC INSTRUMENT COMPILATION (III): Kelsh Plotter		PLANIMETRY L. O. Neterer, Jr. REVIEWED: K. G. Boyle DATE 4/66
		CONTOURS Inapplicable DATE
MANUSCRIPT DELINEATED BY (III): A. L. Shands		DATE 5/66
SCRIBING BY (III):		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): COMPILATION: B. Wilson		DATE 7/26/68
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-1856 thru 1859	8/15/64	10:58	1:30,000	4.0 ft. above MLLW
* 64-1415 thru 1423	8/6/64	14:30	1:10,000	7.8ft. above MLLW
* Color photographs centers not shown on map				

Predicted TIDE (III)

Diurnal

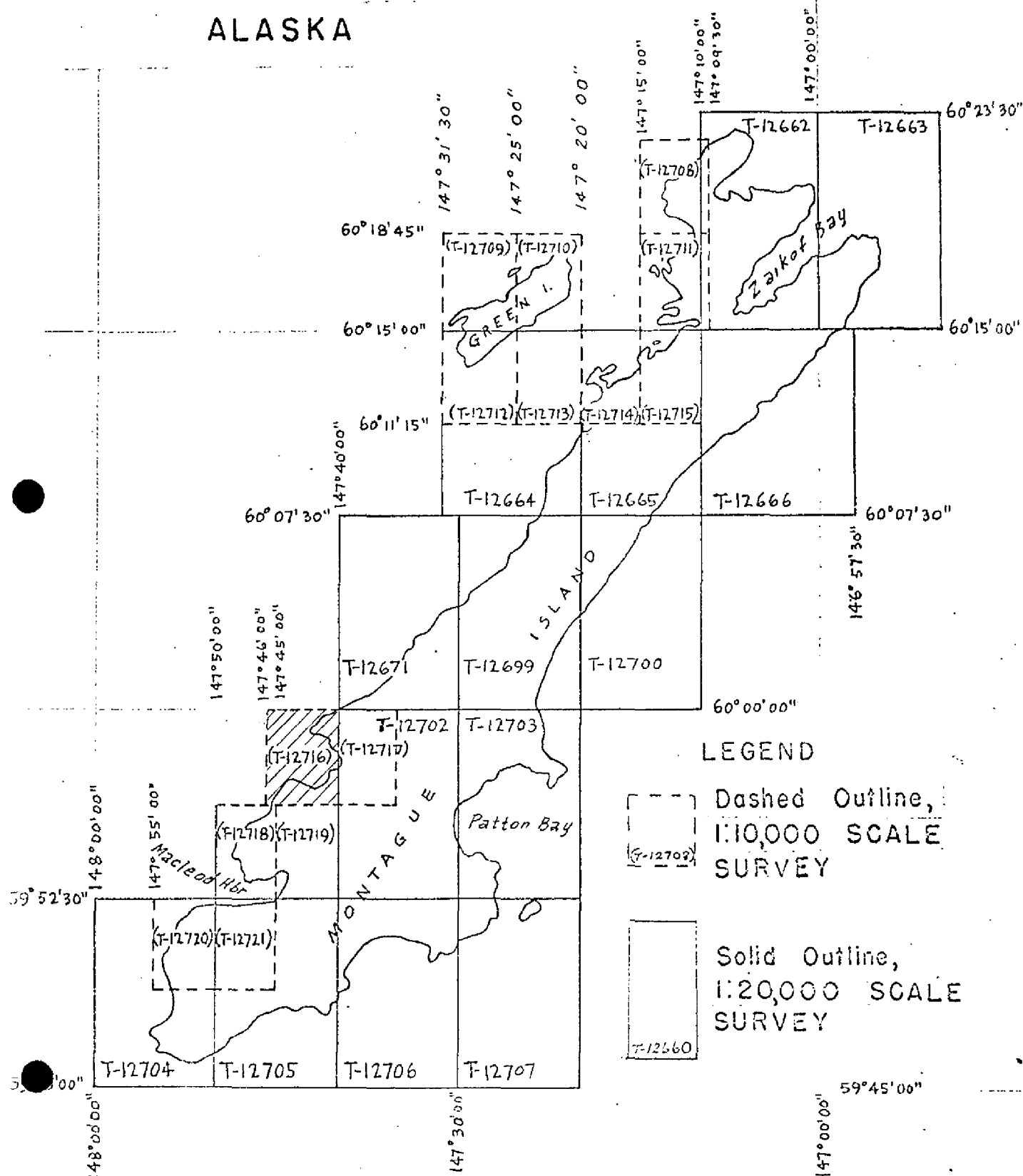
		RATIO OF RANGES	MEAN RANGE	EXPOSED RANGE
REFERENCE STATION: Cordova, Alaska			10.0'	12.4'
SUBORDINATE STATION: Hanning Bay, Alaska			9.2'	11.5'
SUBORDINATE STATION:				
WASHINGTON OFFICE REVIEW BY (IV):		DATE:		
PROOF EDIT BY (IV):		DATE:		
NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): 2	RECOVERED: 2	IDENTIFIED: 1		
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-12716

COMPILATION RECORD	COMPLETION DATE	REMARKS
Compilation complete pending field edit.	7/26/68	Incomplete manuscript
Field edit cancelled.	8/06/75	Incomplete manuscript
Final Review	8/9/77	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-12716

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.

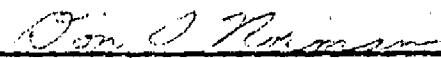
24. Supplemental Data

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

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

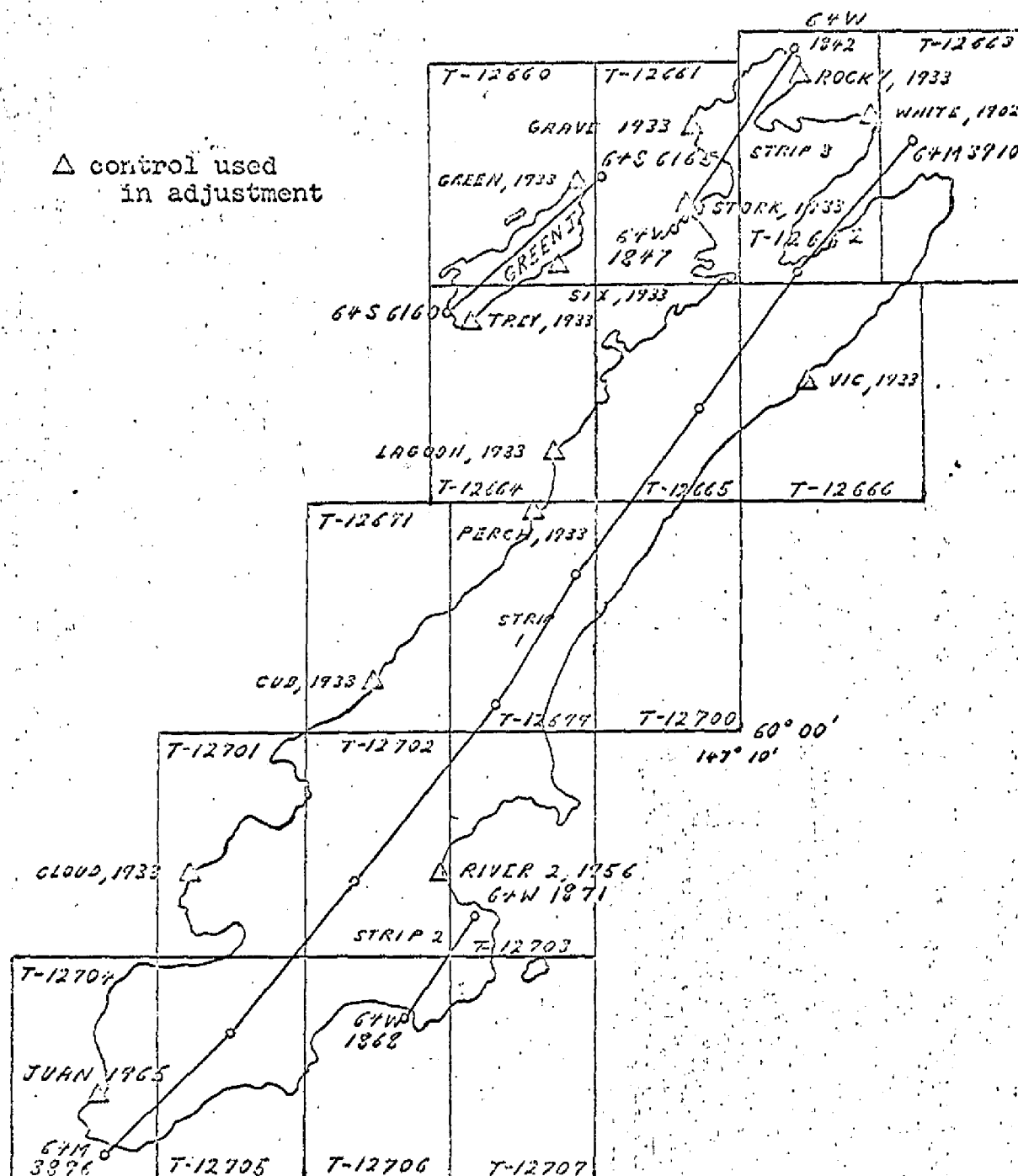
▲ sub station "A"	0.0	0.0
△ sub station "B"	- 0.4	+ 2.4

AEROTRIANGULATION SKETCH

MONTAGUE ISLAND --

PH-6410

November, 1965



COMPILATION REPORT

T-12716

31. DELINEATION:

There was no field inspection.

The Kelsh plotter was used, but the entire shoreline was revised during review. The cronapaque and matte finish ratios were used for refining the inner half of Hanning Bay, using the Kelsh line as an approximate datum. (That area was not covered by the color photography.) The rest of the map was refined from color photographs at approximately one foot below high tide. These were of much sharper definition than the panchromatic photos. The horizontal difference between the Kelsh-panchromatic interpretation of the shoreline and that from the contact color prints were changed in favor of the latter.

32. CONTROL:

See Photogrammetric Plot Report, herewith.

33. SUPPLEMENTAL DATA:

Color photographs, contact scale of 1:10,000, taken August 7, 1964, 64-W-1413 through 1425. See Item 1.

34. CONTOURS AND DRAINAGE:

Drainage was delineated from office interpretation of the photographs.

Contours are inapplicable.

35. SHORELINE AND ALONGSHORE DETAILS:

Item 1 applies to all shoreline and alongshore details.

36. OFFSHORE DETAILS:

No statement.

37. LANDMARKS AND AIDS:

No charted landmarks or aids were noted during compilation.

38. CONTROL FOR FUTURE SURVEYS:

None.

39. JUNCTIONS:

Satisfactory junctions have been made with T-12717 (1:10,000) to the east and T-12718 (1:10,000) to the south. Along the junction with T-12719, also to the south, there is no mapped detail. There is no contemporary survey to the north. ~~The west joins a water area of T-12701 (1:20,000), of which this map, reduced, forms the SE quarter.~~ A.L.S.

40. HORIZONTAL AND VERTICAL ACCURACY:

No statement.

41. COMPARISON WITH OLD SURVEYS:

Comparison has been made with Hydrographic Surveys No. H-4677 dated 1927 and ~~H-4428 dated~~, and discrepancies noted on the Field Edit Ozalid. A.L.S.

46. COMPARISON WITH EXISTING MAPS:

Comparison has been made with USGS ALASKA Quadrangles BLYING SOUND (D-1 and D-2) and BLYING SOUND (D-3), dated 1953, scale 1:63,360, on which the shoreline is approximately at the tree line. It is noted that the March 1964 earthquake raised the area, bringing rock ledges and sandy areas above high water, extending 900 to 2200 feet beyond the tree line.

47. COMPARISON WITH NAUTICAL CHARTS:

Comparison has been made with Chart 8515, scale 1:81,436 (at Lat. 60° 00'), dated November 1935 (7th Edition), corrected to February 14, 1949. The same difference is noted as in Item 46.

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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:

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

July 12, 1977

GEOGRAPHIC NAMES

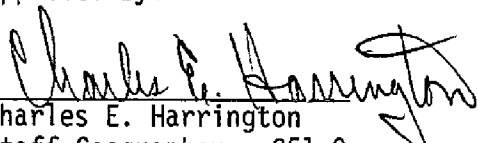
FINAL NAME SHEET

PH-6410 (Montague Island, Alaska)

T-12716

- ✓ Hanning Bay
- ✓ Montague Island
- ✓ Montague Strait
- ✓ Point Bazil

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-12716			
1. PROJECTION AND GRIDS BW	2. TITLE BW	3. MANUSCRIPT NUMBERS BW	4. MANUSCRIPT SIZE BW
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY BW	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 BW	11. DETAIL POINTS BW
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE BW	13. LOW-WATER LINE BW	14. ROCKS, SHOALS, ETC. BW	15. BRIDGES BW
16. AIDS TO NAVIGATION BW	17. LANDMARKS BW	18. OTHER ALONGSHORE PHYSICAL FEATURES BW	19. OTHER ALONGSHORE CULTURAL FEATURES BW
PHYSICAL FEATURES			
20. WATER FEATURES BW	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 BW
CULTURAL FEATURES			
27. ROADS BW	28. BUILDINGS BW	29. RAILROADS BW	30. OTHER CULTURAL FEATURES BW
BOUNDARIES			
31. BOUNDARY LINES NA	32. PUBLIC LAND LINES NA		
MISCELLANEOUS			
33. GEOGRAPHIC NAMES BW	34. JUNCTIONS BW	35. LEGIBILITY OF THE MANUSCRIPT BW	
36. DISCREPANCY OVERLAY BW	37. DESCRIPTIVE REPORT BW	38. FIELD INSPECTION PHOTOGRAPHS NA	39. FORMS BW
40. REVIEWER B. Wilson		SUPERVISOR, REVIEW SECTION OR UNIT 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-12716

SHORELINE

August 10, 1977

61. GENERAL STATEMENT:

See Summary ~~which is~~^{ed} Pages 6a and 6b of this Descriptive Report.

Shoreline, ledge and kelp limits were extended onto the north margin of T-12716 to affect a junction of these features with T-12671. There is no map in this project north of T-12716.

Field edit was cancelled.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Comparison was made with T-2741, T-4311 and T-4836 each, 1:20,000 scale, dated 1905, 1927 and 1933 respectively. The shoreline and alongshore area details are several hundred meters seaward of those previously mapped. This is the results of uplift induced by the 1964 earthquake. No other significant differences were observed.

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. Shoreline differences are noted in paragraph 62. A group of submerged rocks located off the south shore of Hanning Bay are not visible on the photographs.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

No comparison was made. No contemporary hydrographic survey was conducted.

65. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Chart 16701, 1:80,000 scale, 11th edition dated March 10, 1973. Shoreline differences observed are as noted in Paragraph 62 above. A wreck (position approximate) off the south shore of Hanning Bay is not visible on the photographs.

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: ^{BW}

John D. Perrow Jr.

Chief, Photogrammetric Branch

James G. Little

Chief, Coastal Mapping Div.