

T-12704 ORIGINAL

T-12704

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-12704
Classification No. [*] Incomplete Edition No. 1	
LOCALITY	
State Alaska	
General Locality Montague Island	
Locality San Juan Bay	
.....	
<hr/> 19 64 TO 19 <hr/>	
REGISTRY IN ARCHIVES	
DATE	

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

* CLASS III MANUSCRIPT

DESCRIPTIVE REPORT - DATA RECORD

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T-12704

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):

1:20,000

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

~~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):

JUAN, 1965

LAT.:

LONG.:

☐ ADJUSTED☒ UNADJUSTED

PLANE COORDINATES (IV):

STATE

ZONE

y = 2,121,561.64 ft. x = 149,035.78 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 (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): K. G. Boyle		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 C. Blood	DATE 1/68
	Reviewed L. O. Neterer, Jr.	DATE 1/68
	CONTOURS Inapplicable	DATE
MANUSCRIPT DELINEATED BY (III): C. Blood		DATE 7/68
SCRIBING BY (III):		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): COMPILATION: B. Wilson		DATE 10/28/68
REMARKS: FIELD EDIT CANCELLED 8/06/75		

DESCRIPTIVE REPORT - DATA RECORD

T-12704

CAMERA (KIND OR SOURCE) (III):

USC&GS Type "W"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
64 W 1862 thru 1865	8/15/64	11:01	1:30,000	4.0 ft. above MLLW
64 W 1755 and 1756	8/15/64	09:50	1:30,000	4.3 ft. above MLLW
64 W 1809 thru 1811	8/15/64	10:19	1:30,000	4.3 ft. above MLLW
64 W 5763 thru 5766	4/14/64	14:13	1:20,000	1.0 ft. above MHW
64 W 1434 thru 1442	8/07/64	14:33	1:10,000	2.8 ft. below MHW

Predicted TIDE (III)

Diurnal

		RATIO OF RANGES	MEAN RANGE	XSSEXXXX RANGE
REFERENCE STATION: Cordova, Alaska			10.0	12.4
SUBORDINATE STATION:				
SUBORDINATE STATION: Macleod Harbor, Alaska			9.0	11.3
WASHINGTON OFFICE REVIEW BY (IV):		DATE:		
PROOF EDIT BY (IV):		DATE:		
NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): 1	RECOVERED: 1	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:

COMPILATION RECORD	COMPLETION DATE	REMARKS
Alongshore area for hydro.	10/28/68	Incomplete manuscript
Field edit cancelled.	8/06/75	Incomplete manuscript
Final Review.	8/77	Class III manuscript
FEW CORRECTIONS MADE PRIOR TO REGISTRATION	TO MARINE CHARTS 6/8/78	"

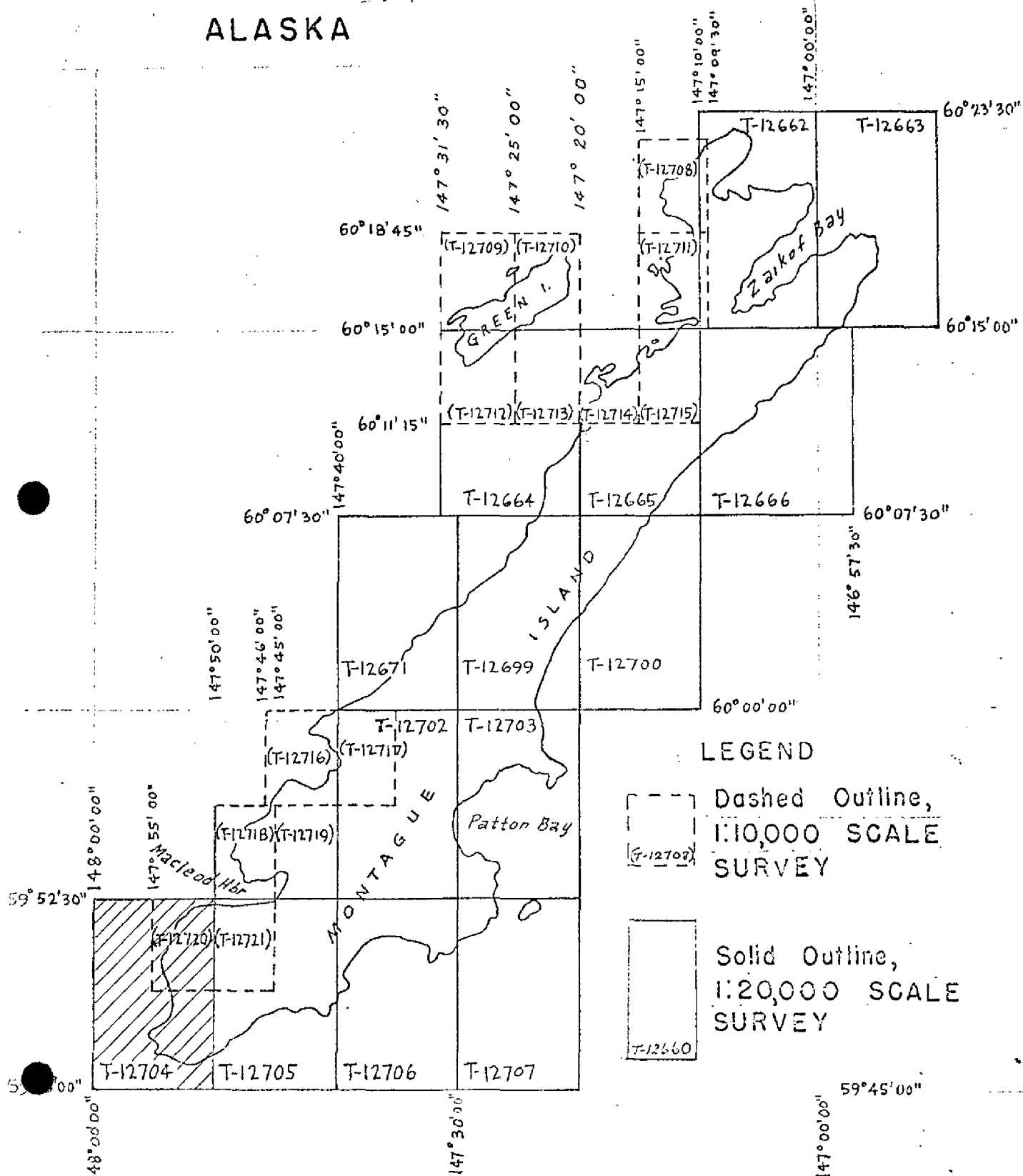
JOB PH-6410

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

T-12704

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.

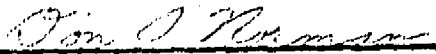
24. Supplemental Data

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

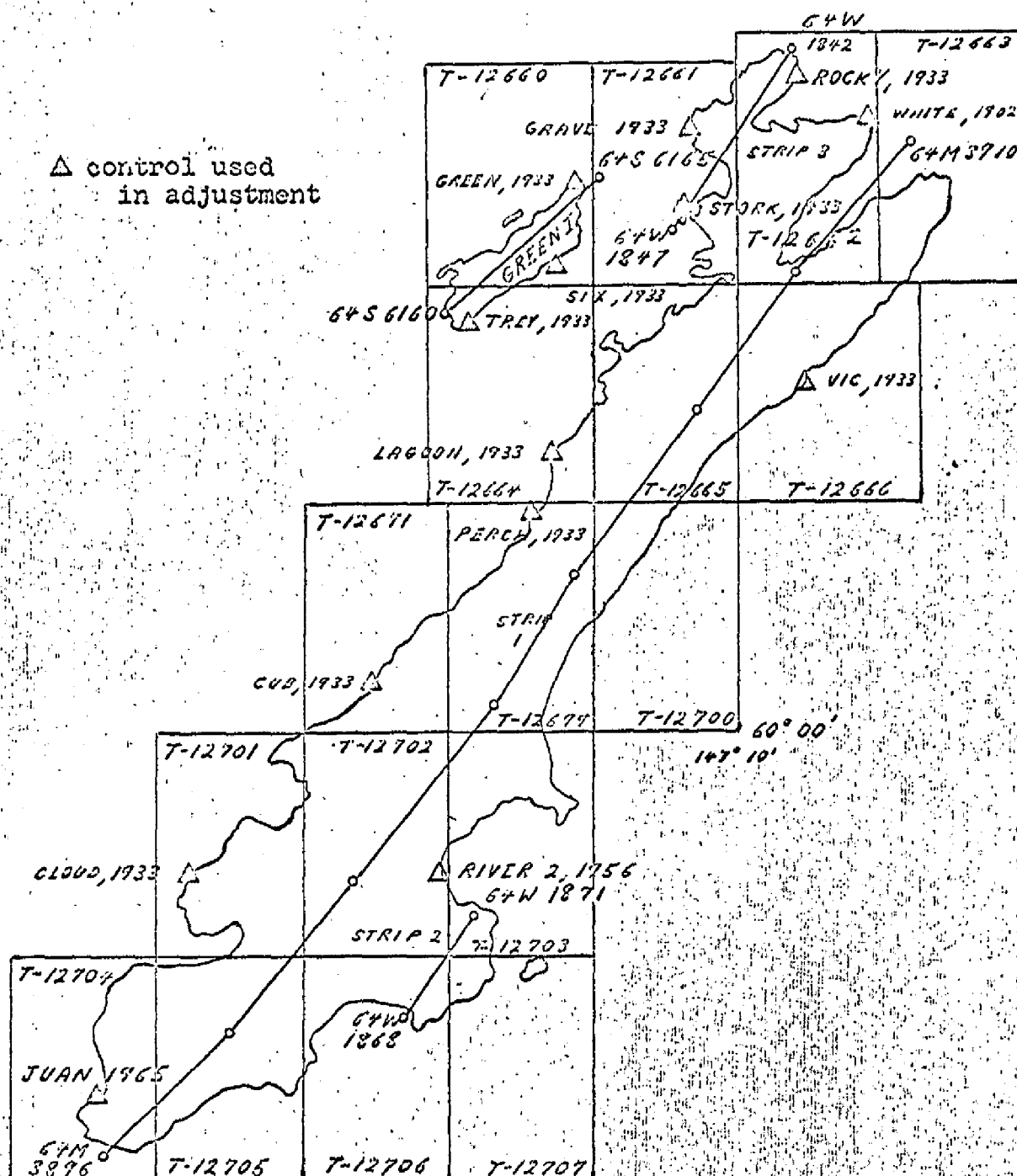
GREEN ISLAND

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



DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	T-12704	JOB NO.	PH-6410	GEODETIC DATUM	NA 1927	ORIGINATING ACTIVITY	Division, AMC, Norfolk, Virginia	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
STATION NAME		SOURCE OF INFORMATION (Index)	AEROTRI- ANGULATION POINT NUMBER	COORDINATES IN FEET STATE ZONE	Alaska 3	GEOGRAPHIC POSITION ϕ LATITUDE λ LONGITUDE	REMARKS FORWARD BACK	
JUAN, 1965		P.C. Form 738 Trav. Comp.		X= 149,035.78 Y= 2,121,561.64		ϕ λ	9035.78 (964.22) 1561.64 (8438.36)	
				X=		ϕ		
				Y=		λ		
				X=		ϕ		
				Y=		λ		
				X=		ϕ		
				Y=		λ		
				X=		ϕ		
				Y=		λ		
				X=		ϕ		
				Y=		λ		
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				Y=		λ		
				X=		ϕ		
				Y=		λ		
				X=		ϕ		
				Y=		λ		
COMPUTED BY	A. C. Rauck, Jr.	DATE	1/19/68	COMPUTATION CHECKED BY	B. Wilson	DATE	8/28/68	
LISTED BY		DATE		LISTING CHECKED BY		DATE		
HAND PLOTTING BY		DATE		HAND PLOTTING CHECKED BY		DATE		

COMPILATION REPORT

T-12704

31. DELINEATION:

The Kelsh plotter was used. The photography was satisfactory. There was no field inspection.

32. CONTROL:

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

33. SUPPLEMENTAL DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours are inapplicable.

See Item 31 for drainage.

35. SHORELINE AND ALONGSHORE DETAILS:

The shoreline and all alongshore details were delineated from office interpretation of the photographs.

36. OFFSHORE DETAILS:

See Item 31.

37. LANDMARKS AND AIDS:

None.

38. CONTROL FOR FUTURE SURVEYS:

None.

39. JUNCTIONS:

Junction has been made with T-12705 and T-12721 at 1:10,000 scale to the east. There is no contemporary survey to the north, west, or south.

40. HORIZONTAL AND VERTICAL ACCURACY:

No statement.

41. COMPARISON WITH OLD HYDROGRAPHIC SURVEYS:

This map has been compared with H-4730, dated 1927, scale 1:60,000.

46. COMPARISON WITH EXISTING MAPS:

Comparison has been made with USGS Quadrangle BLYING SOUND (D-3), ALASKA, dated 1953, scale 1:63,360.

47. COMPARISON WITH NAUTICAL CHARTS:

Comparison has been made with Chart 8515, scale 1:81,436, published November 1935 (7th edition) and revised to February 14, 1949.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Respectfully submitted:

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

Approved:

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-12704

Cape Cleare ✓

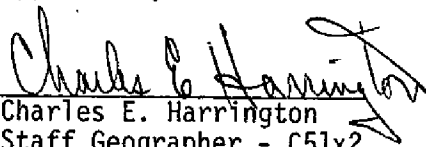
Gulf of Alaska ✓

Montague Island ✓

Montague Strait ✓

San Juan Bay ✓

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. 12704			
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 NA	11. DETAIL POINTS BW
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE BW	13. LOW-WATER LINE BW	14. ROCKS, SHOALS, ETC. BW	15. BRIDGES NA
16. AIDS TO NAVIGATION NA	17. LANDMARKS NA	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 NW	28. BUILDINGS NW	29. RAILROADS NW	30. OTHER CULTURAL FEATURES NW
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	37. DESCRIPTIVE REPORT BW	38. FIELD INSPECTION PHOTOGRAPHS NA	39. FORMS NA
40. REVIEWER B. Wilson <i>Albert C. Rauck, Jr. For.</i> B. Wilson 10/28/68		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-12704

SHORELINE

August 2, 1977

61. GENERAL STATEMENT:

See Summary, ^{on} which ~~is~~ pages 6a and 6b of this Descriptive Report.

Glare along the south shore near the eastern limit of the map prevented the complete delineation of the foul limit in that area. 1:10,000 scale map T-12720 forms the northeast quadrant of T-12704. The Descriptive Report for T-12720 should be consulted for information regarding the compilation of that area.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Comparison was made with T-4311, 1:20,000 scale dated 1927 mapped on Valdez Datum. The shoreline was observed to be from 200 to 400 meters seaward of the position mapped on T-4311. The new shoreline and along-shore features were created as a result of the uplift caused by the 1964 earthquake.

The tidal marsh area mapped immediately east of San Juan Bay has become a stream fed lake. Ruins mapped on the south shore of San Juan Bay are not visible on the photography.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

Comparison was made with U.S.G.S. Quadrangle, Blying Sound (D-3), Alaska, 1:63,360 scale, dated 1953. The shoreline shown on the quadrangle was observed to be 200 to 400 meters inshore of that shown on T-12704. No other differences were noticed.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

No contemporary hydrographic surveys were conducted in the area bounded by this map.

65. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Chart 16701, 1:80,000 scale, 11th edition, dated March 10, 1973. The differences observed are the same as those noted in Paragraph 62.

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. Perrow Jr.

Chief, Photogrammetric Branch

James G. ...

Chief, Coastal Map. Div.