

T-12671

ORIGINAL

T-12671

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-12671
Classification No. * Incomplete Edition No. ... 1

LOCALITY

State Alaska
General Locality Montague Island
Locality The Needle

1964 TO 1975

REGISTRY IN ARCHIVES

DATE

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

* CLASS III MANUSCRIPT

DESCRIPTIVE REPORT - DATA RECORD

T-12671

PROJECT NO. (II):

PH-6410

FIELD OFFICE (III):

None

CHIEF OF PARTY

PHOTOGRAMMETRIC OFFICE (III):

Coastal Mapping Division
Atlantic Marine Center, Norfolk, Va.

OFFICER-IN-CHARGE

J. Bull-Director

INSTRUCTIONS DATED (III) (III):

Field	8/21/64
Office	2/08/65
Field	2/18/65
Office, Amendment I	2/19/65
Office, Amendment I to Feb. 19, 1965 Instructions	2/26/65
Field	4/02/65
Office	12/06/65
Office Amendment I	1/66
Field	3/15/66
Office Amendment I	4/26/66

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

~~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):

CUB, 1933

LAT. 60°00' 55.976"
(1732.4 M)LONG. 147°36' 33.216"
(514.6 M)☒ ADJUSTED
☐ UNADJUSTED

PLANE COORDINATES (IV):

STATE

ZONE

= 2,201,189.01 ft. x = 205,573.68 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 Aug. 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 11/19/65
PROJECTION AND GRIDS CHECKED BY (IV): R. S. Kornspan		DATE 11/19/65
CONTROL PLOTTED BY (III): L. O. Neterer, Jr.		DATE 3/28/66
CONTROL CHECKED BY (III): K. G. Boyle		DATE 3/28/66
XXXXXXXX STEREOSCOPIC CONTROL EXTENSION BY (III): D. O. Norman A. P. Eichart		DATE 11/65
STEREOSCOPIC INSTRUMENT COMPILATION (III): Kelsh Plotter	PLANIMETRY J. S. Place Reviewed: B. H. Barnes	DATE 6/66 6/66
	CONTOURS Inapplicable	DATE
MANUSCRIPT DELINEATED BY (III): J. S. Place		DATE 6/66
SCRIBING BY (III):		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): Compilation B. Wilson Field Edit		DATE 10/68
REMARKS: Field Edit By: M. H. Fleming (Partial) 5/75		

DESCRIPTIVE REPORT - DATA RECORD
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CAMERA (KIND OR SOURCE) (i)(i):

PHOTOGRAPHS (iii)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
64W-1798-1800	8/15/64	10:14	1:30,000	4.3 ft. above MLLW
64W-1855-1856	8/15/64	10:55	1:30,000	4.0 ft. above MLLW

PREDICTED

TIDE (iii)

Diurnal

	RATIO OF RANGES	MEAN RANGE	SPRINGS RANGE
REFERENCE STATION: Cordova		10.0	12.4
SUBORDINATE STATION: Hanning Bay		9.2	11.5
SUBORDINATE STATION:			

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
Compilation complete pending field edit	6/66	Incomplete Manuscript
Partial fiel edit applied	6/77	Incomplete Manuscript
Final Review	7/77 8/77	Class III Manuscript
A FEW CORRECTIONS WERE MADE PRIOR TO REGISTRA- TION:	TO MARINE CHARTS 6/8/78	"

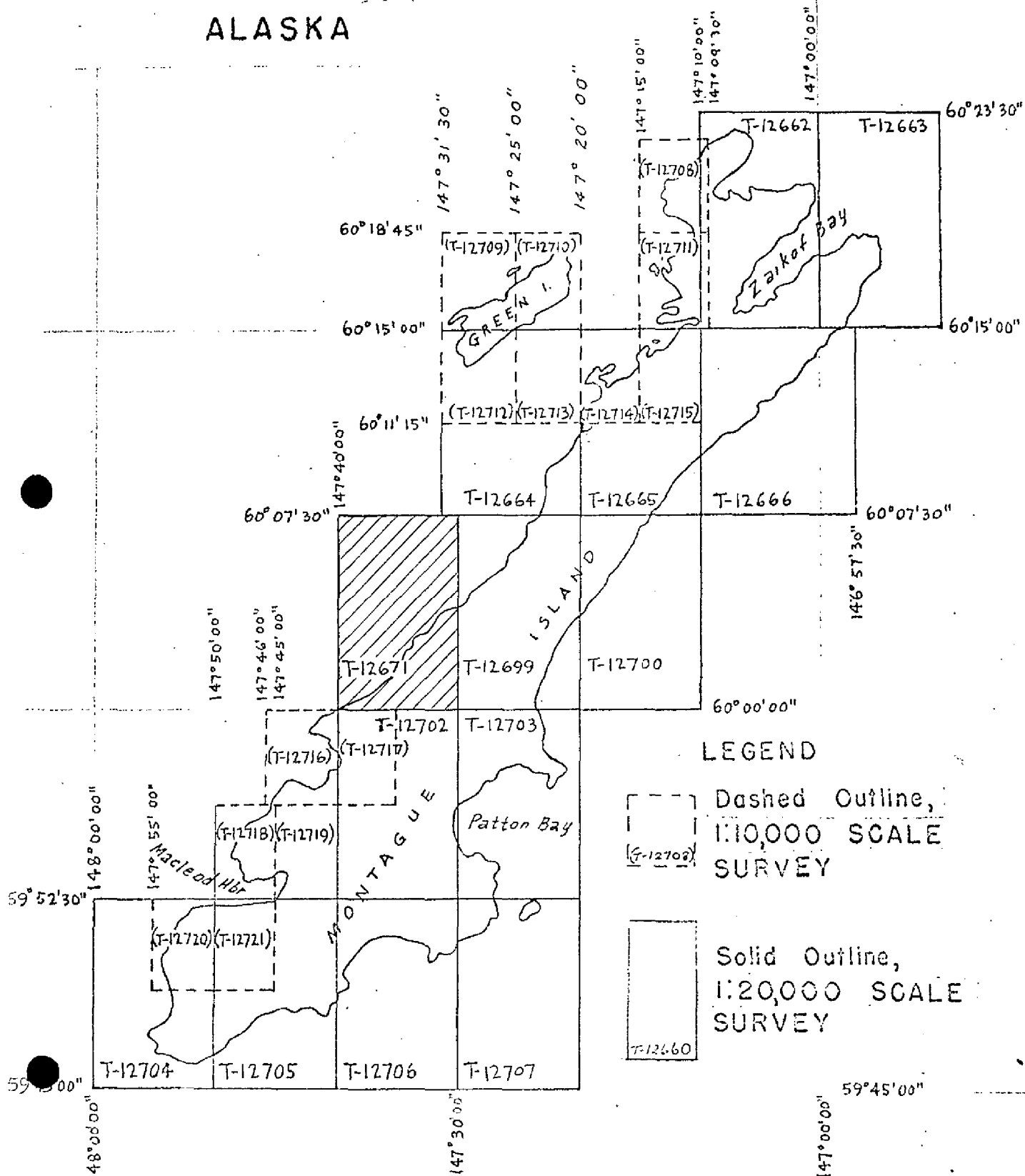
JOB PH-6410

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-12671

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

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" -0.2 - 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

▲ used as check

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

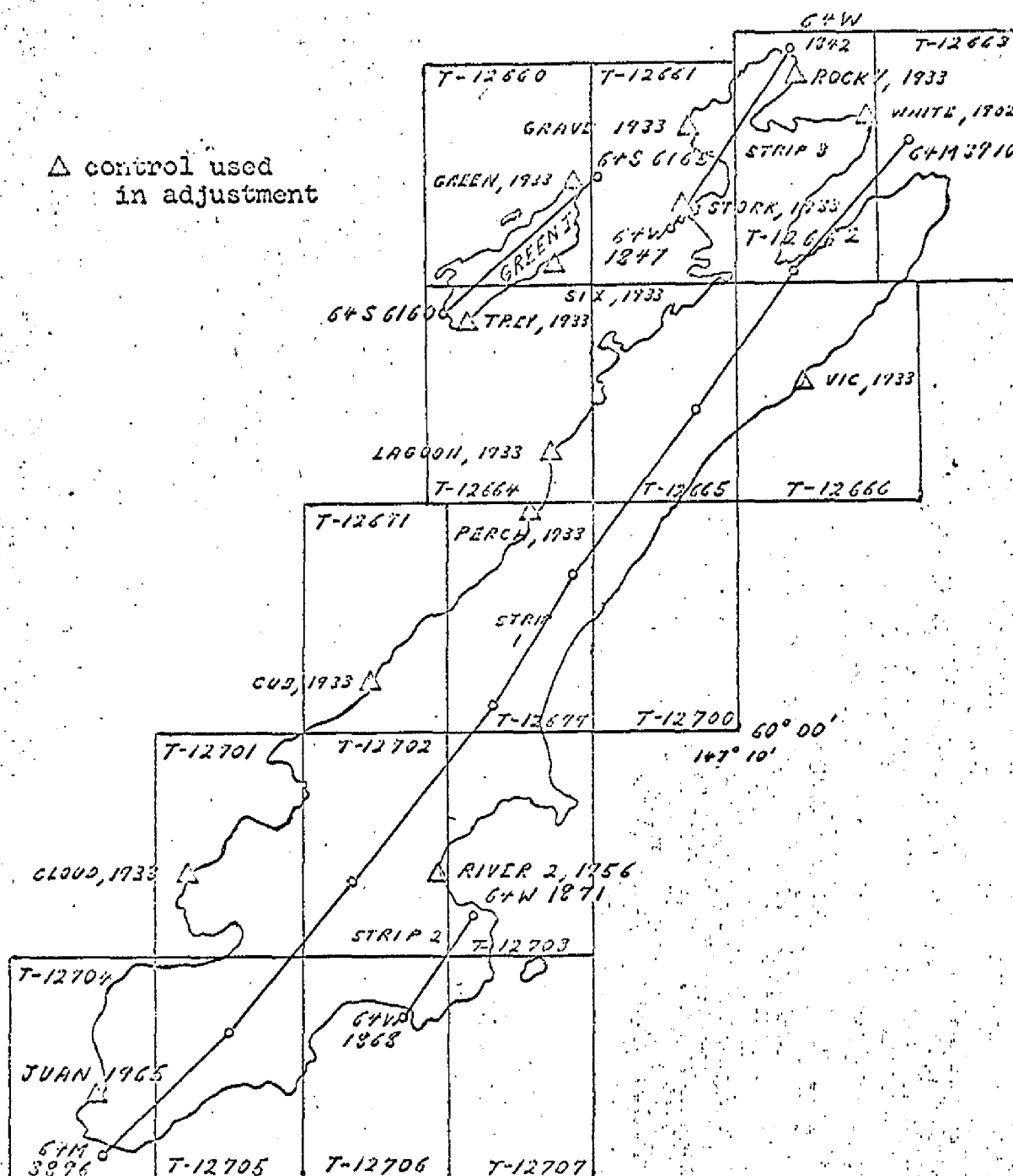
GREEN ISLAND

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

Δ control used
in adjustment



DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	JOB NO.	PH-6410	GEODETIC DATUM		NA	1927	ORIGINATING ACTIVITY	
			STATION NAME	REMARKS				
T-12671			SOURCE OF INFORMATION (Index)	AEROTRIANGULATION POINT NUMBER	COORDINATES IN FEET STATE Alaska ZONE 3	GEOGRAPHIC POSITION ϕ LATITUDE λ LONGITUDE	Division, AMC Norfolk, Va.	
CUB, 1933 ✓			G.P. Vol 6 P. 288		X=	ϕ 60 00 55.976	FORWARD BACK	
					Y=	λ 147 36 33.216	1732.4(124.5) 514.6(415.0)	
NEEDLE, 1933 ✓			G.P. Quad 60147 P.15		X=	ϕ	7,984(2016)	
					Y=	λ	6,086(3914)	
					X=	ϕ		
					Y=	λ		
					X=	ϕ		
					Y=	λ		
					X=	ϕ		
					Y=	λ		
					X=	ϕ		
					Y=	λ		
					X=	ϕ		
					Y=	λ		
					X=	ϕ		
					Y=	λ		
					X=	ϕ		
					Y=	λ		
					X=	ϕ		
					Y=	λ		
COMPUTED BY	C. Bishop			DATE	7/12/66	COMPUTATION CHECKED BY	C. Blood	
LISTED BY				DATE		LISTING CHECKED BY		
HAND PLOTTING BY				DATE		HAND PLOTTING CHECKED BY		
						DATE	7/12/66	
						DATE		
						DATE		

COMPILATION REPORT

T-12671

31. DELINEATION:

The "model area" of 64W-1855 and 64W-1856 was compiled graphically; otherwise, the area of Montague Island was compiled with the Kelsh plotter and the shoreline and other details revised or completed graphically (without assistance from field inspection) from satisfactory photographs.

The island and rocks awash in the vicinity of "The Needle" were not covered by the photographs; they were applied to the manuscript from Chart 8515, by use of the vertical projector.

32. CONTROL:

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

33. SUPPLEMENTAL DATA:

Chart 8515 (See paragraph 47)

34. CONTOURS AND DRAINAGE:

Contours are inapplicable.
Drainage (See paragraph 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:

Junctions have been made with T-12699 to the east. There is no compiled detail along the junction with T-12702 to the south. There is no contemporary survey to the north and west.

40. HORIZONTAL AND VERTICAL ACCURACY:

No statement.

46. COMPARISON WITH EXISTING MAPS:

Comparison has been made with USGS Quadrangle SEWARD (A-2), ALASKA, scale 1:63,360 dated 1951. (minor revisions 1963)

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 CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

Albert C. Rauck, Jr. For
John S. Place
Cartographer

Approved:

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

July 12, 1977

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6410 (Montague Island, Alaska)

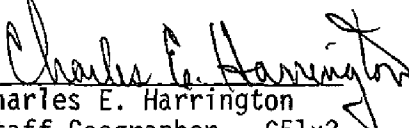
T-12671

Montague Island ✓

Montague Strait ✓

The Needle ✓

Approved by:


Charles E. Harrington
Staff Geographer - C51x2

NOAA FORM 75-74 (7-75)		U.S. DEPARTMENT OF COMMERCE NOAA NATIONAL OCEAN SURVEY	
PHOTOGRAMMETRIC OFFICE REVIEW			
TR - 12671			
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) X		7. PHOTO HYDRO STATIONS XX
8. BENCH MARKS XX	9. PLOTTING OF SEXTANT FIXES X	10. PHOTOGRAMMETRIC PLOT REPORT BW	11. DETAIL POINTS KELSH BW
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE BW	13. LOW-WATER LINE BW	14. ROCKS, SHOALS, ETC. BW	15. BRIDGES XX
16. AIDS TO NAVIGATION X	17. LANDMARKS X	18. OTHER ALONGSHORE PHYSICAL FEATURES BW	19. OTHER ALONGSHORE CULTURAL FEATURES X
PHYSICAL FEATURES			
20. WATER FEATURES BW		21. NATURAL GROUND COVER X	22. PLANETABLE CONTOURS XX
23. STEREOSCOPIC INSTRUMENT CONTOURS XX	24. CONTOURS IN GENERAL XX	25. SPOT ELEVATIONS XX	26. OTHER PHYSICAL FEATURES BW
CULTURAL FEATURES			
27. ROADS X	28. BUILDINGS X	29. RAILROADS XX	30. OTHER CULTURAL FEATURES X
BOUNDARIES			
31. BOUNDARY LINES XX		32. PUBLIC LAND LINES XX	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES BW		34. JUNCTIONS BW	35. LEGIBILITY OF THE MANUSCRIPT BW
36. DISCREPANCY CHECK Field Edit Ozalid BW	37. DESCRIPTIVE REPORT BW	38. FIELD INSPECTION PHOTOGRAPHS XX	39. FORMS X
40. REVIEWER B. Wilson 10/17/68 <i>Albert C. Rauck, Jr. for</i>		SUPERVISOR, REVIEW SECTION OR UNIT A. C. Rauck, Jr. <i>Albert C. Rauck, Jr.</i>	
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 J. R. Minton (Partial) 5/27/77 reviewer: L. O. Netter, Jr. 6/77 <i>Lowell O. Netter, Jr.</i>		SUPERVISOR <i>Albert C. Rauck, Jr.</i> A. C. Rauck, Jr.	
43. REMARKS Field Edit applied from Field Edit Ozalid, Field Annotated Matte Photos 64W 1797- 64W 1799			

EDIT
FIELD ~~INSPECTION~~ REPORT
T-12671
in support of the

MONTAGUE ISLAND AMPHIBIOUS TRAINING CHART SURVEY
SP-PMC-4-DA-75

INTRODUCTION

The area covered by this report is that of Montague Island between LAT 60/00/00 N, LONG 147/40/00 W and LAT 60/04/00 N, LONG 147/30/00 W. The area is rocky sedimentary coastline, forests and swamps inshore, and numerous kelp and rocky areas off shore.

METHODS

Photographs and a field ozalid work copy were taken into the field for this inspection. Special attention was paid to locating additional seaward hazards to navigation and fore-shore classification. Any features noted as additions to the field edit ozalid were located with respect to recognizable local features and hydrographic control methods. A cursory inspection was made also of the apparent MHHW line and tree-vegetation line.

RECOMMENDATIONS

All foreshore features are now classified, and all additional navigation hazards have been located.

Photogrammetric compilation is in general excellent, and the approximate MLLW, MHHW, and vegetation lines should be accepted as adequate for use on the chart.

Submitted by:

David J. Tennesen

D. J. Tennesen ENS NOAA

Approved by:

Michael H. Fleming

M. H. Fleming, } CDR NOAA
Commanding Officer

REVIEW REPORT

T-12671

SHORELINE

August 11, 1977

61. GENERAL STATEMENT:

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

This map was partially field edited from its eastern limit to longitude $147^{\circ} 36.7'$. The island, The Needle was not included in the field edit.

The compilation office delineated The Needle and surrounding details on the map by tracing from the 1:81,436 scale Chart 8515. However, because the tracing required a more than four times blow up and the likelihood that the uplift in the area has produced significant changes, The Needle and surround details were deleted during final review.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Comparison was made with T-4836 1:20,000 scale, dated June-September 1933, compiled on the Valdez Datum. The Shoreline on T-12671 is about 100 meters seaward of that shown on T-4836. This is probably due to the uplift caused by the earthquake.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

Comparison was made with USGS Quadrangle Seaward (A-2), Alaska, 1:63,360 scale, dated 1951 with minor revisions in 1963. The shoreline difference is the same as noted in paragraph 62.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

No contemporary hydrographic survey of the area was available at AMC at the time of final review.

65. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Chart 16701, 1:80,000 dated March 10, 1973, 11th edition. Shoreline differences are noted in paragraph 62.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This map complies with 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: *pu*

John D. Perraw Jr
Chief, Photogrammetric Branch

John C. ...
Chief, Coastal Mapping Div.