

T-12711

ORIGINAL

T-12711

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-12711.....
Classification No. ^{*}Incomplete Edition No. ...1.....

LOCALITY

State Alaska.....
General Locality Montague Island.....
Locality Stockdale Harbor.....

19 64 TO 19

REGISTRY IN ARCHIVES

DATE

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

* CLASS III MANUSCRIPT

DESCRIPTIVE REPORT - DATA RECORD

T - 12711

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, RADM, 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):

Plotter (Kelsh) and Graphic

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):

N.A., 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 LOWER LOW WATER~~

REFERENCE STATION (III):

STORK, 1933

LAT.:

LONG.:

☒ ADJUSTED☐ UNADJUSTED

60°17'25.832" (799.5M)

147°13'55.297" (849.6M)

PLANE COORDINATES (IV):

STATE

ZONE

Y = 2,300,194.12 ft.

X = 276,454.97 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.

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

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

USC&GS Type "W"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
64W-1846 and 1847	15 Aug. 1964	10:52	1:30,000	4.2 ft. above MLLW
64W-1788	"	10:10	"	4.6 "

TIDE (III)

PREDICTED

DIURNAL

	RATIO OF RANGES	MEAN RANGE	SEMI RANGE
REFERENCE STATION: CORDOVA		10.0	12.4
SUBORDINATE STATION: Port Chalmers		9.3	11.7
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV):

DATE:

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):

RECOVERED:

IDENTIFIED:

1

1

1

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

RECOVERED:

IDENTIFIED

None

None

None

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

None

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

None

REMARKS:

T-12711

COMPILATION RECORD	COMPLETION DATE	REMARKS
Compilation complete pending field edit.	11/08/66	Incomplete manuscript
Field edit cancelled.	8/06/75	Incomplete manuscript
Final Review	8/77	Class III manuscript
A FEW CORRECTIONS WERE MADE PRIOR TO REGISTRA- TION.	TO MARINE CHARTS 6/8/78	"

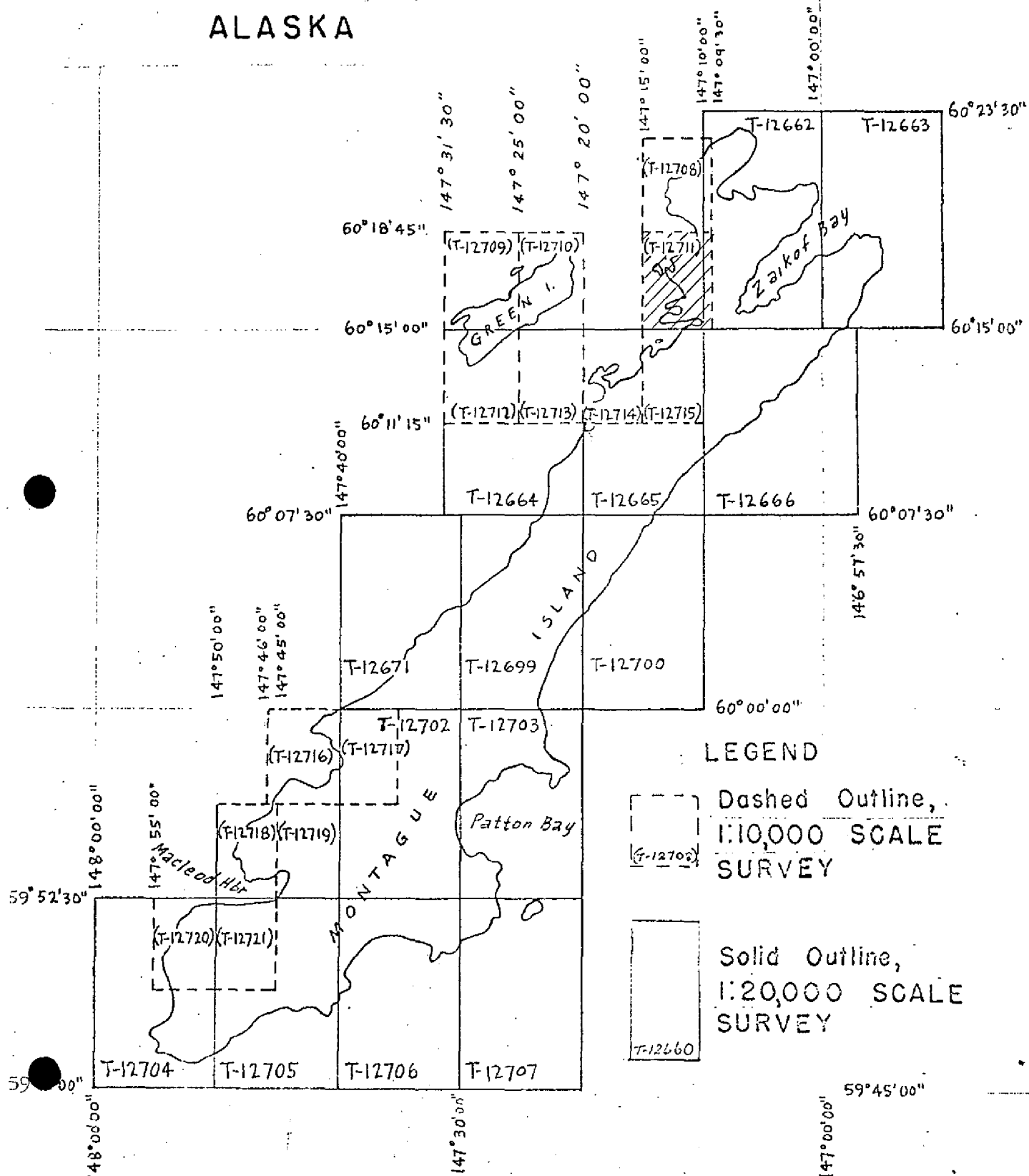
JOB PH-6410

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
Project PH-6410
T-12711

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.

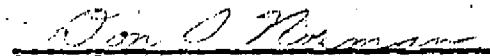
24. Supplemental Data

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

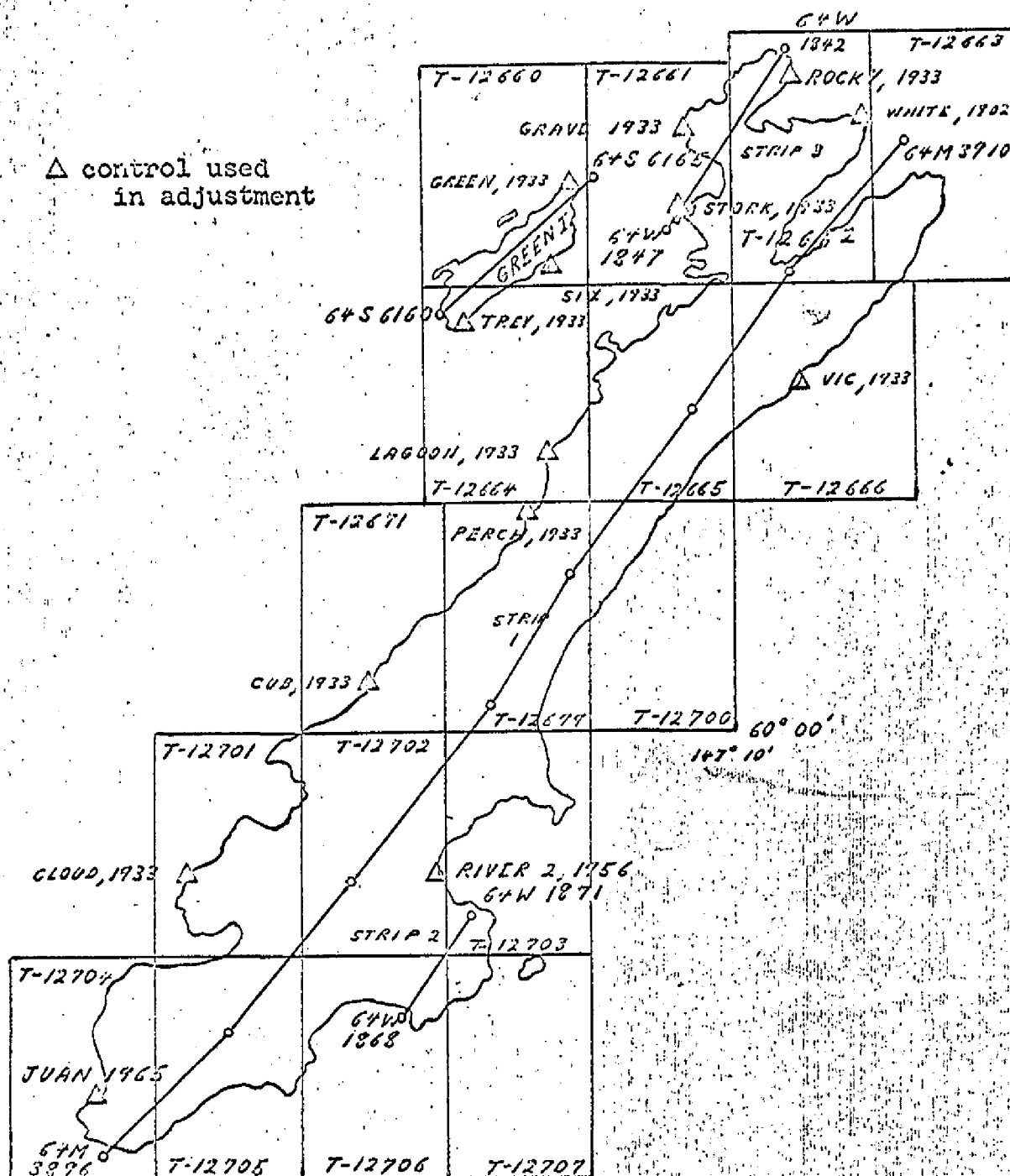
TREY, 1933
 ▲ sub station "A" 0.0 0.0
 △ sub station "B" - 0.3 + 1.6

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

△ control used
in adjustment



COMPILATION REPORT
Map Manuscript T-12711
Project PH-6410

31. DELINEATION:

Most of the delineation was done with the Kelsh Plotter; however, some rocks, reefs, and foreshore limits that were missed during instrument compilation were compiled graphically.

Photography was satisfactory.

There was no field inspection.

32. CONTROL:

See Photogrammetric Plot Report.

33. SUPPLEMENTAL DATA:

None

34. CONTOURS AND DRAINAGE:

Contours are inapplicable.

Drainage was compiled from office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS:

All shoreline and alongshore details were compiled from office interpretation of the photographs.

36. OFFSHORE DETAILS:

Offshore reefs were compiled from office interpretation of the photographs. There was adequate photo coverage for these features.

37. LANDMARKS AND AIDS:

None

38. CONTROL FOR FUTURE SURVEYS:

None.

39. JUNCTIONS:

Satisfactory junctions have been made with T-12708 to the north and T-12715 to the south. No detail on this manuscript extends to T-12662 (scale 1:20,000) to the east. There is no contemporary survey to the west.

40. HORIZONTAL AND VERTICAL ACCURACY:

No statement.

46. COMPARISON WITH EXISTING MAPS:

Comparison has been made with USGS Quadrangle SEWARD (B-1), ALASKA, scale 1:63,360, dated 1951, and discrepancies noted on the FIELD EDIT OZALID.

47. COMPARISON WITH NAUTICAL CHARTS:

Comparison has been made with Nautical Chart 8515, scale 1:81,436, revised February 13, 1961, and discrepancies noted on the FIELD EDIT OZALID.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None

Submitted by:

Charles H. Bishop

C. H. Bishop
Cartographer

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-12711

✓ Gilmour Point

✓ Montague Island

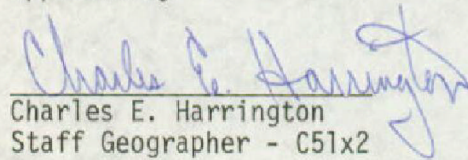
✓ Port Chalmers

~~✓ Prince William Sound~~

✓ Stockdale Harbor

✓ *MONTAGUE STRAIT*
pw

Approved by:


Charles E. Harrington
Staff Geographer - C51x2

REVIEW REPORT
T-12711

SHORELINE

August 31, 1977

61. GENERAL STATEMENT:

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

T-12711 overlaps into 1:20,000 scale map T-12662 for 30 seconds of longitude on the east. Details in this overlap area are shown on both maps.

In making the comparison of T-12711 with the registered topographic map, USGS Quadrangle and nautical chart, identified in paragraphs 62, 63 and 65 below, it was observed that a new shoreline and new alongshore and offshore area details were created by uplift caused by the 1964 earthquake. The shoreline on T-12711 was observed to be seaward of its previously mapped position. Offshore islands and reef areas are larger in size.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Comparison was made with T-4837, 1:20,000 scale, dated June-September 1933. Differences observed are noted in Paragraph 61 above.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

Comparison was made with USGS Quadrangle Seward (B-1), ALASKA, 1:63,360 scale, dated 1951. Differences observed are noted in Paragraph 61 above.

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. See Paragraph 61.

It is apparent from the comparisons that the uplift is general and occurred throughout the area. Though the magnitude is not known in this specific area, uplifts of 10.5 ft. were recorded at Wilby Island just to the south (see note B on chart). It is reasonable therefore to expect soundings previously recorded at less than 2 fathoms to be dangerously close to or above the mean lower low water level. However, no photographic images appear at lat. $60^{\circ} 15.7'$, long. $147^{\circ} 15.0'$, lat. $60^{\circ} 16.5'$, long. $147^{\circ} 13.7'$ and lat. $60^{\circ} 16.8'$, long. $147^{\circ} 14.0'$ where soundings of $1\frac{1}{2}$, $1\frac{1}{2}$ and $1\frac{3}{4}$ fathoms respectively are recorded

Field edit was cancelled for this map.

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

Sam Allen

Chief, Coastal Mapping Div.