DESCRIPTIVE REPORT

Type of Survey: Shoreline
Job No.: PH-6410
Map No.: T-12702
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: 1974-762-981
* CLASS III MANUSCRIPT
# Descriptive Report - Data Record

**T-12703**

**Project No. (III):**

PH-6410

**Field Office (III):**

None

**Photogrammetric Office (III):**

Atlantic Marine Center, Norfolk, Virginia

**Chief of Party:**

J. Bull - Director

**Officer-in-Charge:**


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<tr>
<th>INSTRUCTIONS, DATED (III)</th>
<th>DATED (III)</th>
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<tbody>
<tr>
<td>Field</td>
<td>Aug. 21, 1964</td>
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<tr>
<td>Office</td>
<td>Feb. 8, 1965</td>
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<td>Field</td>
<td>Feb. 18, 1965</td>
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<td>Office, Amendment I</td>
<td>Feb. 19, 1965</td>
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<td>Field</td>
<td>Apr. 2, 1965</td>
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<td>Office</td>
<td>Dec. 6, 1965</td>
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<td>Jan. 1966</td>
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<td>Mar. 15, 1966</td>
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<td>Apr. 26, 1966</td>
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**Method of Compilation (III):**

Kelsh plotter and graphic

**Manuscript Scale (III):**

1:20,000

**Stereoscopic Plotting Instrument Scale (III):**

1:16,000 pantographed to 1:20,000

**Date Received in Washington Office (IV):**

**Date Reported to Nautical Chart Branch (IV):**

**Applied to Chart No.:**

**Date: (IV):**

Aug 1978

**Geographic Datum (III):**

NA, 1927

**Vertical Datum (III):**

MNW

**Reference Station (III):**

River 2, 1956

**Lat.:**

59° 54' 43.381" (1342.6M)

**Long.:**

147° 29' 47.742" (742.0M)

**Plane Coordinates (IV):**

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

**State:**

Alaska

**Zone:**

3

**Notes:**

Roman numerals indicate whether the item is to be entered by (III) 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

**T-12703**

**FIELD INSPECTION BY (III):**

None

**DATE:**

**MEAN HIGH WATER LOCATION (III) [STATE DATE AND METHOD OF LOCATION]:**

Air photo compilation - August 15, 1964

*NO MEAN LOWER LOW WATER LINE IS DELINEATED ON THIS MAP.*

**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):**

- **Planimetry: B. Wilson**
- **REVIEWED: L. O. Neterer, Jr.**
- **DATE:** 12/68 & 1/69

**CONTOURS:**

- **Kelsh Plotter**
- **REVIEWED:** L. O. Neterer, Jr.
- **DATE:** 12/68 & 1/69

- **Inapplicable**

**MANUSCRIPT DELINEATED BY (III):**

- **B. Wilson**
  - **DATE:** 1/17/69

**SCRIBING BY (III):**

**DATE:**

**PHOTOGRAMMETRIC OFFICE REVIEW BY (III):**

- **COMPILED: R. J. Pate**
  - **DATE:** 2/69

**REMARKS:**

- **FIELD EDIT CANCELLED**
  - **DATE:** 8/06/75
### Descriptive Report - Data Record

**T-12703**

**Photographs (III)**

<table>
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<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
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<tr>
<td>64W-1870 and 1871</td>
<td>8/15/64</td>
<td>11:10</td>
<td>1:30,000</td>
<td>4.0 ft. above MLLW</td>
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<tr>
<td>64W-1874 and 1875</td>
<td>8/15/64</td>
<td>11:10</td>
<td>1:30,000</td>
<td>4.0 ft. above MLLW</td>
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<tr>
<td>64W-1823 and 1824</td>
<td>8/15/64</td>
<td>10:26</td>
<td>1:30,000</td>
<td>4.1 ft. above MLLW</td>
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**Predicted Tide (III)**

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<th>Reference Station: Cordova, Alaska</th>
<th>Diurnal</th>
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<tbody>
<tr>
<td>Subordinate Station: Patton Bay, Alaska</td>
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**Washington Office Review by (IV):**

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<th>Proof Edit by (IV):</th>
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**Number of Triangulation Stations Searched for (III):** 6

**Number of Recoverable Photo Stations Established (III):** None

**Remarks:** None
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<th>Completion Date</th>
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<td>Field edit cancelled.</td>
<td>8/06/75</td>
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<tr>
<td>Final Review</td>
<td>7/77</td>
<td>Class III manuscript</td>
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A few corrections were made prior to registration.

To marine charts 6/18/76
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° 06.7', long. 147° 36.1' (THE NEEDLE) and lat. 60° 11.9', long. 147° 27.1' and a rock at lat. 60° 17.3', long. 147° 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:

[Signature]

Don O. Norman

Approved and forwarded:

[Signature]

Henry P. Eichert
Acting Chief, Aerotriangulation Section
FIT TO CONTROL (feet)

STRIP #1

JUAN, 1965  
\(\Delta\) sub station "A" -45.1  +23.9  \(\Delta\) used in adjustment  
\(\Delta\) sub station "B" -1.0  -0.1  \(\Delta\) used as check

CLOUD, 1933  
\(\Delta\) sub station "A" +8.8  +5.5
\(\Delta\) sub station "B" +1.1  +1.3

CUB, 1933  
\(\Delta\) sub station "A" -7.0  +1.9
\(\Delta\) sub station "B" +1.5  -3.7

PERCH, 1933 RM #3  
\(\Delta\) sub station "A" -1.9  +0.1
\(\Delta\) sub station "B" -0.2  -1.1

LAGOON, 1933  
\(\Delta\) sub station "A" -0.2  +3.0
\(\Delta\) sub station "B" +3.6  +11.9

WHITE, 1902  
\(\Delta\) sub station "A" +14.0  +5.2
\(\Delta\) sub station "B" +0.5  -0.9

STRIP #2 (adjusted on tie points from Strip #1)

\(\Delta\) 14401  +0.4  -0.3
\(\Delta\) 14402  -0.8  +0.8
\(\Delta\) 14403  +0.9  -1.2
\(\Delta\) 14404  -0.4  +0.4

STRIP #3

ROCKY, 1933  
\(\Delta\) sub station "A" -2.0  -2.0
\(\Delta\) sub station "B" 0.0  0.0

GRAVE, 1933  
\(\Delta\) sub station "A" 0.0  0.0
\(\Delta\) sub station "B" -1.8  -1.0

STORK, 1933  
\(\Delta\) direct  +2.1  -1.6
\(\Delta\) sub station  +0.1  0.0

GREEN ISLAND

TREY, 1933  
\(\Delta\) sub station "A" 0.0  0.0
\(\Delta\) sub station "B" -0.3  +1.6

SIX, 1933 RM #2  
\(\Delta\) sub station "A" -1.9  +0.6
\(\Delta\) sub station "B" 0.0  0.0

GREEN, 1933  
\(\Delta\) sub station "A" 0.0  0.0
\(\Delta\) sub station "B" -0.4  +2.4
AEROTRIANGULATION SKETCH
MONTAGUE ISLAND
PH-6410
November, 1965

\( \Delta \) control used in adjustment
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<th>STATION NAME</th>
<th>SOURCE OF INFORMATION</th>
<th>AEROTRIANGULATION POINT NUMBER</th>
<th>COORDINATES IN FEET</th>
<th>GEOGRAPHIC POSITION</th>
<th>REMARKS</th>
<th>FORWARD</th>
<th>BACK</th>
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<td>G.P. Vol 6 P. 376</td>
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<td>x=</td>
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<td>ISLE 2, 1965 (TEMP.)</td>
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COMPUTED BY A. C. Rauck, Jr. DATE 1/18/68
LISTED BY DATE
HAND PLOTTING BY DATE
COMPUTATION CHECKED BY B. Wilson DATE 11/27/68
LISTING CHECKED BY DATE
HAND PLOTTING CHECKED BY DATE
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:

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.
B. Wilson
Cartographic Technician

Approved:

Albert C. Rauck, Jr.
Chief, Coastal Mapping Section, AMC
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 - C5lx2
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<thead>
<tr>
<th>1. PROJECTION AND GRIDS</th>
<th>2. TITLE</th>
<th>3. MANUSCRIPT NUMBERS</th>
<th>4. MANUSCRIPT SIZE</th>
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**CONTROL STATIONS**

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<th>5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY</th>
<th>6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations)</th>
<th>7. PHOTO HYDRO STATIONS</th>
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**ALONGSHORE AREAS (Nautical Chart Data)**

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<tr>
<th>8. BENCH MARKS</th>
<th>9. PLOTTING OF SEXTANT FIXES</th>
<th>10. PHOTOGRAMMETRIC PLOT REPORT</th>
<th>11. DETAIL POINTS</th>
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**PHYSICAL FEATURES**

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<tr>
<th>12. SHORELINE</th>
<th>13. LOW-WATER LINE</th>
<th>14. ROCKS, SHOALS, ETC.</th>
<th>15. BRIDGES</th>
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**AIDS TO NAVIGATION**

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<th>16. AIDS TO NAVIGATION</th>
<th>17. LANDMARKS</th>
<th>18. OTHER ALONGSHORE PHYSICAL FEATURES</th>
<th>19. OTHER ALONGSHORE CULTURAL FEATURES</th>
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**CULTURAL FEATURES**

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<th>20. WATER FEATURES</th>
<th>21. NATURAL GROUND COVER</th>
<th>22. PLANETABLE CONTOURS</th>
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**CONTOURS IN GENERAL**

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<th>23. STEREOSCOPIC INSTRUMENT CONTOURS</th>
<th>24. CONTOURS IN GENERAL</th>
<th>25. SPOT ELEVATIONS</th>
<th>26. OTHER PHYSICAL FEATURES</th>
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**BOUNDARIES**

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<tr>
<th>27. ROADS</th>
<th>28. BUILDINGS</th>
<th>29. RAILROADS</th>
<th>30. OTHER CULTURAL FEATURES</th>
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**PUBLIC LAND LINES**

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**GEOGRAPHIC NAMES**

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<th>34. JUNCTIONS</th>
<th>35. LEGIBILITY OF THE MANUSCRIPT</th>
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**DISCREPANCY OVERLAY**

<table>
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<tr>
<th>36. DISCREPANCY OVERLAY</th>
<th>37. DESCRIPTIVE REPORT</th>
<th>38. FIELD INSPECTION PHOTOGRAPHS</th>
<th>39. FORMS</th>
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<tbody>
<tr>
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**REVIEWER**

R. J. Pate (2/69) / A. C. Ranck, Jr. (2/69)

**REMARKS (See attached sheet)**

**FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT**

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**

**REMARKS**

FIELD EDIT CANCELLED 8/06/75
61. GENERAL STATEMENT:

See Summary, 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-8470 for nautical chart construction purposes in those areas where comparison was made.

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:

John D. Flanagan
Chief, Photogrammetric Branch

James Cullen
Chief, Coastal Mapping Division