**U. S. COAST AND GEODETIC SURVEY**

**DEPARTMENT OF COMMERCE**

**DESCRIPTIVE REPORT**

- **Type of Survey:** Topographic
- **Field No.:** Ph-34(48)
- **Office No.:** T-11329

**LOCALITY**

- **State:** Alaska
- **General locality:** Andreanof Islands
- **Locality:** Three Arm Bay, Adak Island

- **1953-55**

**CHIEF OF PARTY**

S.B. GRENELL, Chief of Field Party
L.W. SWANSON, Div. of Photo. Wash., D.C.

**LIBRARY & ARCHIVES**

**DATE:** May 15, 1958
9121 - Partly Applied DIR 8-4-67
16467 - Applied Joseph Petruna 12/30/92
DATA RECORD

T - 11329

Project No. (II): 7-6034  
Quadrangle Name (IV): Three Arm Bay, Adak  
(Ph-34 (48))

Field Office (II): Ship EXPLORER  
Chief of Party: S. B. Grenell

Photogrammetric Office (III): Washington, D. C.  
Officer-in-Charge: L. W. Swanson

Instructions dated (II) (III):

Supplemental Instructions dated 19 March 1952  
20 Feb. 1953  
23 Dec. 1953  
Office Files  
731-mkl

Compilation Instructions dated 10 Nov. 1954  
31 Oct. 1955

Method of Compilation (III): Interior and Contours - READING PLOTTER  
Shoreline - GRAPHIC

Manuscript Scale (III): 1:20,000  
Stereoscopic Plotting Instrument Scale (III): 1:20,000

Scale Factor (III): 1.0

Date received in Washington Office (IV): Date reported to Nautical Chart Branch (IV):

Applied to Chart No. Date: Date registered (IV): 5 Dec 1957

Publication Scale (IV): Publication date (IV):

Geographic Datum (III): NA 1927

Vertical Datum (III):

Mean sea level except as follows:
Elevations shown as (2) refer to mean high water
Elevations shown as (3) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): ZEP (USN) 1933

Lat.: 51°39'58.388"  
51°39'58.388"  
180°4.5° (49.3) m.

180°4.5° (49.3) m.

Long.: 176°54'52.058"  
176°54'52.058"  
1000.5° (152.6) m.

1000.5° (152.6) m.

Plane Coordinates (IV): State:

Y= U.T.M. Grid - Zone 1

X=

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.
Areas contoured by various personnel
(Show name within area)
(II) (III)
DATA RECORD

Field Inspection by (II):

Shoreline inspection by H. G. Conory
C. W. Clark
J. D. Walker

Planetable contouring by (II):
S. L. Hollis

Completion Surveys by (II):

Mean High Water Location (III) (State date and method of location):

Field inspection - 1954 and 1955
Date of photography - Sept. 25, 1953

Projection and Grids ruled by (IV):
Austin Riley

Projection and Grids checked by (IV):

Control plotted by (III):
J. P. Battley, Jr.

Control checked by (III):
R. J. French

Radial Plot of Stereoscopic Instrument compilation (III):
Roscoe J. French

Planimetry

Stereoscopic Instrument compilation (III):
W. Heinbaugh
Contours

Manuscript delineated by (III):
J. P. Battley, Jr. (shoreline)
W. Heinbaugh (Topography)

Photogrammetric Office Review by (III):
K. N. Maki (shoreline)
L. Levin (topography)

Elevations on Manuscript
checked by (II) (III):

Date: 1954 Season
SURVEYOR

Date: 1955 Season
EXPLORER

Date: 10-19-54

Date: 12-12-54

Date: 10-19-54

Date: 12-12-54

Date: 12-15-54

Date: 3-10-55

Date: 12-16-55

Date: 1-27-56

Date: 12-16-55

Date: 2-2-56
**PHOTOGRAPHS (III)**

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
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<tbody>
<tr>
<td>42150-152</td>
<td>9-25-53</td>
<td>2:26-7</td>
<td>1:20,000</td>
<td>&quot;2' above MFW</td>
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<tr>
<td>42171-42174</td>
<td>n</td>
<td>2:52-5</td>
<td>N</td>
<td>&quot;3' above MFW</td>
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</table>

**Tide (III)**

*Reference Station: Sweeper Cove, Adak, Alaska
Subordinate Station: Kanaga Bay, Kanaga Island
Bay of Waterfalls

Washington Office Review by (IV): Everett H. Ramey
Final Drafting by (IV): M. Charity
Drafting verified for reproduction by (IV): Wm. O. Halluin

Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III): 26
Shoreline (More than 200 meters to opposite shore) (III): 40
Shoreline (Less than 200 meters to opposite shore) (III): —
Control Leveling - Miles (II): —
Number of Triangulation Stations searched for (II): 4
Number of BMs searched for (II): —
Number of Recoverable Photo Stations established (III): 5
Number of Temporary Photo Hydro Stations established (III): —

Remarks: *Sweeper Cove
Bay of Waterfalls

Tide data from Division of Tides and Currents - Mr. Wilcox - 21 Nov 1955

**Refer to Photogrammetric Plot Report**
Summary to Accompany Topographic Map T-11329

Topographic map T-11329 was accomplished as part of Project 6034. It covers an area of the western part of Adak Island of the Aleutian Islands, including a part of the Bay of Waterfalls.

The western shoreline of this map was field inspected in 1954 and the eastern shoreline adjacent to the Bay of Waterfalls was field inspected in 1955. Contemporary hydrographic surveys were also executed for the area. Coast and Geodetic Survey nine-lens photographs taken in 1953 were used for both inspection and compilation. These were supplemented in some areas by Air Force single-lens photographs taken June 1943. The field work included the inspection of alongshore areas and the identification and establishment of control.

The map was compiled at 1:20000 scale using nine-lens photographs. The graphic method was used for alongshore features and the Reading Nine-Lens Plotter for interior features and topography. The map was not field edited. After the addition of hydrography the map will be published by the Army Map Service as a standard 1:25000 scale quadrangle.

Items registered under T-11329 will include a cloth-back copy of the map manuscript and the descriptive report.
Field Inspection Report

The Field Inspection Report for the 1954 Season is filed as part of the Descriptive Report for T-11324 and covers the western part of T-11329. The Field Inspection Report for the 1955 Season is filed as part of the Descriptive Report for T-11322 and T-11323 and covers the eastern part of T-11329.
Photogrammetric Plot Report

This report covers T-ll324, T-ll325, T-ll329, T-ll330 (Part) and T-ll334, and is filed as part of the Descriptive Report for T-ll324.
PH-34
RADIAL PLOT SKETCH

▲ HELO
▲ HELO (TOLERANCE LISTED)
● HELO (TOPO)
■ PEAKS
X NOT LOCATED

See Radial Plot report filed with T-11324
<table>
<thead>
<tr>
<th>STATION</th>
<th>Desc. Source of Information (Index) Page</th>
<th>G.P. Datum</th>
<th>Latitude or y-coordinate Longitude or x-coordinate</th>
<th>Distance from Grid in Feet or Projection Line in Meters</th>
<th>Datum Correction</th>
<th>N.A. 1927 Datum Distance from Grid or Projection Line in Meters</th>
<th>Factor Distance from Grid or Projection Line in Meters</th>
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</thead>
<tbody>
<tr>
<td>Cat (USE)</td>
<td>580' 1943</td>
<td>V</td>
<td>51-42-30.098</td>
<td>930.2</td>
<td>924.2</td>
<td>(On T-11330)</td>
<td></td>
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<tr>
<td>Zep (USN)</td>
<td>660' 1933</td>
<td>6</td>
<td>176-51-15.438</td>
<td>296.4</td>
<td>855.6</td>
<td>1824.5</td>
<td>49.8</td>
</tr>
<tr>
<td>Arm (USE)</td>
<td>460' 1943</td>
<td>6</td>
<td>176-54-52.058</td>
<td>1000.5</td>
<td>152.6</td>
<td>51-46-22.543</td>
<td></td>
</tr>
<tr>
<td>Rock</td>
<td>Vol. V p. 833 1927</td>
<td>NA</td>
<td>176-51-35.564</td>
<td>683.4</td>
<td>169.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 ft. = 0.03048006 meter

Computed by: N. S. Schultz Date: 2-5-54
Checked by: J. P. Battley, Jr. Date: 12-20-54
31. **DELINEATION:**

Shoreline and foreshore features were delineated on the map manuscript by graphic methods. Field inspection was available for this survey.

A section of vinylite work sheet material was superimposed over the photograph having the most nearly true map scale and clarity of image detail and the shoreline was traced while being observed as a stereoscopic view. A prior nine-lens stereo instrument shoreline delineation of the west shoreline of the Bay of Waterfalls, done without field inspection, was available. Conflicts or discrepancies between the two shorelines were resolved satisfactorily.

The contours, drainage and interior planimetric detail were delineated on the Reading Nine-Lens plotters and added to the shoreline manuscript.

32. **CONTROL:**

Horizontal control was adequate.

No vertical control was established. All rectification and orientation of the stereo models was based on the adjusted elevation of the water surface.

33. **SUPPLEMENTAL DATA:**

No supplemental information from sources other than listed in Item 14 of the Field Inspection Report was used in this compilation.

34. **CONTOURS AND DRAINAGE:**

No unusual difficulty was encountered in delineating the contours and drainage.

35. **SHORELINE AND ALONGSHORE DETAILS:**

Shoreline inspection was generally adequate with the exception that shadow areas were not field delineated in every instance. Such areas were delineated by office inspection.

36. **OFFSHORE DETAILS:**

Offshore details such as rocks, reefs, and small islands were well covered by field inspection and no unusual problems were encountered concerning these features.
37. **LANDMARKS AND AIDS:**

None.

38. **CONTROL FOR FUTURE SURVEYS:**

Form 524, recoverable topographic station, has been submitted for the following five stations:

- Lake, 1954
- Pike, 1954
- Ring, 1954
- Seal, 1954
- Drum, 1954

A list of photo-hydro stations occurring on this map has been included under Paragraph 49.

39. **JUNCTIONS:**

Junctions have been made with T-11334 to the south, T-11330 to the east and T-11324 to the north. The junction area to the west with T-9941 is in water area.

40. **HORIZONTAL AND VERTICAL ACCURACY:**

Refer to the photogrammetric plot report included in the Descriptive Report for T-11324.

46. **COMPARISON WITH EXISTING MAPS:**

T-11329 is a complete topographic map and supersedes all previous maps for nautical charting of the area covered. The following previous surveys cover the map area.

- T-6941, 1:40,000, 1933 (Sheet No. 12)
- T-6942 -- 1933 (H. O. No. 305610-154)
- Adak, Alaska, USGS, 1:250,000 Reconnaissance map
- Adak, Sheets Nos. 3 and 7; Corps of Engineers, 1:25,000 scale, 1943

47. **COMPARISON WITH NAUTICAL CHARTS:**

9193, 1:120,000, corrected to 7/5/54

This map is complete and adequate to supersede the land details on the above-listed nautical chart.
COMPARISON WITH NAUTICAL CHARTS (Continued):

Items to be applied to Nautical Charts immediately - None.

Items to be carried forward - None.

Approved:

C. Theurer
Acting Chief, Cartographic Branch

Submitted:

Louis Levin
Supervisory Cartographer
Nine Lens Stereomapping Section
48. GEOGRAPHIC NAME LIST:

Adak Island.
Adak Strait.
Alaska.
Aleutian Islands.
Andresonof Islands.
Bay of Waterfalls.
Hook Point.
Lake Point.
Middle Arm.
Middle Rock.
South Arm.
Split Point.
The Three Sisters.
Wedge Point.

Three Arm Bay (see title) Names approved 5-7-56. L. Heck
### Notes for the Hydrographer

Following is a list of the photo-hydro stations falling on T-11329:

<table>
<thead>
<tr>
<th>Add</th>
<th>Ole</th>
<th>Gob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bah</td>
<td>Poi</td>
<td>Orb</td>
</tr>
<tr>
<td>Cab</td>
<td>Sac</td>
<td>Rod</td>
</tr>
<tr>
<td>Del</td>
<td>Pip</td>
<td>Yet</td>
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<tr>
<td>Ego</td>
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<td>Val</td>
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<tr>
<td>Goo</td>
<td>Cut</td>
<td>Pop</td>
</tr>
<tr>
<td>Gra</td>
<td>Fun</td>
<td></td>
</tr>
</tbody>
</table>
PHOTOGRAMMETRIC OFFICE REVIEW

T-11329

1. Projection and grids **X**
2. Title **X**
3. Manuscript numbers **X**
4. Manuscript size **X**

CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy **X**
6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) **X**
7. Photo hydro stations **X**
8. Bench marks **X**
9. Plotting of sextant fixes **X**
10. Photogrammetric plot report **X**
11. Detail points **X**

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline **X**
13. Low-water line **X**
14. Rocks, shoals, etc. **X**
15. Bridges **X**
16. Aids to navigation **X**
17. Landmarks **X**
18. Other alongshore physical features **X**
19. Other alongshore cultural features **X**

PHYSICAL FEATURES

20. Water features **X**
21. Natural ground cover **X**
22. Planetary contours **X**
23. Stereoscopic instrument contours **X**
24. Contours in general **X**
25. Spot elevations **X**
26. Other physical features **X**

CULTURAL FEATURES

27. Roads **X**
28. Buildings **X**
29. Railroads **X**
30. Other cultural features **X**

BOUNDARIES

31. Boundary lines **X**
32. Public land lines **X**

MISCELLANEOUS

33. Geographic names **X**
34. Junctions **X**
35. Legibility of the manuscript **X**
36. Discrepancy overlay **X**
37. Descriptive Report **X**
38. Field inspection photographs **X**
39. Forms **X**

Reviewer
Supervisor, Review Section or Unit

41. Remarks (see attached sheet) The radial plot, shoreline, and foreshore were done in Graphic Compilation Unit (W.O.) - RJF. Photo-hydros were checked in Stereo Section. West shoreline Bay of Waterfalls done in 1956. KNM.

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

43. Remarks: Need contours and interior planimetry - KNM 1/56
62. **Comparison with Registered Topographic Surveys:**

T-6941, 1:40000, 1933 (USN)
T-6942 rec. (USN) 1933

For the area it encompasses T-11329 is to supersede these prior surveys for nautical charting purposes.

63. **Comparison with Maps of Other Agencies:**

Adak (No. 7 of 10) (AMS), 1:25000, 1943

A difference in datum of several hundred meters exists between these two maps. T-11329 shows alongshore features in much more detail than this AMS map.

64. **Comparison with Contemporary Hydrographic Surveys:**

Blue prints 51871, 51872, 51873, 52902, 52903 and 52904 (boat sheets for 1954 surveys)

No discrepancies exist with these surveys.

65. **Comparison with Nautical Charts:**

9193 1:120000 1953, corrected to 54 - 7/5

No significant discrepancies are evident.

66. **Adequacy of Results and Future Surveys:**

This map is adequate for Bureau requirements. Except as noted under Item 35, no significant deficiencies were detected.

Everett H. Ramsey
APPROVED BY:

La Harte
Chief, Review and Drafting Section
Photogrammetry Division

Max J. Bruchetto
Chief, Nautical Chart Branch
Charts Division

A. Benelli
Chief, Photogrammetry Division

Chief, Coastal Surveys Division
History of Hydrographic Information for T-11329

Hydrography was added to the map manuscript in accordance with Army Map Service Technical Instruction 48 dated 5 May 1950.

Depths are in fathoms at mean lower low water datum and originate from the following sources:

- Blue Prints 51871, 51872, 51873, 52902, 52903 and 52904 (boat sheets for Surveys of 1954);
- Hydrographic Survey H-6882, 1:40000, 1933; and
- Nautical Charts 9121 corrected to 52-8/25 and 9193 corrected to 54-7/5.

Hydrography was compiled by Lena T. Stevens on 16 February 1956 and verified by O. Svendsen on 5 March 1956.

[Signature]
Lena T. Stevens