

11533

11533

<p>Form 504</p> <p>U. S. DEPARTMENT OF COMMERCE</p> <p>COAST AND GEODETIC SURVEY</p> <p><b>DESCRIPTIVE REPORT</b></p>
<p>Type of Survey <u>Topographic</u></p> <p>Field No. _____ Office No. <u>T-11533</u></p>
<p><b>LOCALITY</b></p> <p>State <u>Alaska (Aleutian Islands)</u></p> <p>General locality <u>Andreanof Islands</u></p> <p>Locality <u>Atka Island</u></p>
<p><u>19 53-54</u></p> <p><b>CHIEF OF PARTY</b></p> <p>W. H. Bainbridge, Chief of Party</p> <p>L. W. Swanson, Washington Office</p>
<p><b>LIBRARY &amp; ARCHIVES</b></p> <p>DATE _____</p>

# DATA RECORD

T 11533

Project No. (II): **PH-34**

Quadrangle Name (IV):

Field Office (II): **Ship "Pioneer"**

Chief of Party: **W. H. Bainbridge**

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

Instructions dated (II) (III):  
Project Instructions

16 Dec. 1954

Copy filed in Division of

Supp. "

10 Nov. 1955

Photogrammetry (IV)

" "

1 Oct. 1956

Office Files

Compilation "

5 Nov. 1957

Method of Compilation (III): **Graphic - shoreline; Reading Plotter - contours**

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):

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): **N. A. 1927**

Vertical Datum (III):

Mean sea level except as follows:

Elevations shown as (25) refer to mean high water

Elevations shown as (S) refer to sounding datum

i.e., mean low water or mean lower low water

Reference Station (III):

Lat.:

Long.:

Adjusted

Unadjusted

Plane Coordinates (IV): **Universal Transverse  
Mercator**

State: **Alaska**

Zone: **1**

Y=

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.

C. Misfeldt

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

## DATA RECORD

Field Inspection by (II): None W.H. Bainbridge  
Limited to recovery and  
establishment of horizontal and vertical control.

Date: *May - 1953*  
*June*

Planetable contouring by (H): **None**

Date:

Completion Surveys by (II): **None**

Date:

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

Identified by stereoscopic examination on photographs taken in 1953 and 1954

Projection and Grids ruled by (IV): **Joan Chaconis**

Date: 1-29-57

**Projection and Grids checked by (IV):**

Date:

Control plotted by (III): G. Amburn

Date: Jan. 1957

Control checked by (III): H. Lucas

Date: Jan. 1957

Radial Plot or Stereoscopic Control extension by (III): J. Battley

Date: Feb. 1957

Stereoscopic Instrument compilation (III): **C. Misfeldt**

Date: August 1960

Manuscript delineated by (III): R. Sugden (shoreline)

Date: 7 Aug. 1957

C. Misfeldt (contours)

August 1960

Photogrammetric Office Review by (H): E. Ramey (shoreline)

Date: 30 Apr. 1958

L. Levin (contours)

September 1960

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

L. Levin

Date: September 1960

Camera (kind or source) (III): 9-lens

PHOTOGRAPHS (III)				
Number	Date	Time	Scale	Stage of Tide
42002	9-21-53	1535	1:20,000	2.5 (predicted) <sup>above</sup> MLLW
42003	"	1535	"	
45993	9-6-54	1328	"	3.5 (observed) "
45994	"	"	"	
46039	"	1919	"	4.3 (observed) "
46040	"	"	"	

Tide (III)

Reference Station: Sweeper Cove, Adak I.  
Subordinate Station: Bechevin Bay, Atka I.  
Subordinate Station: Martin Harbor, Atka I.

Ratio of Ranges	Mean Range	Spring Range	H	L
	3.7			
	3/5		0:10	0:05
	3.2		0:20	0:20

Washington Office Review by (IV): K. N. Maki

Date: Aug. 1971

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

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

Recovered: Identified:  
Recovered: Identified:

Remarks:

## Part C



Summary to Accompany Descriptive Report T-11533

Topographic map T-11533 is one of a series of similar maps covering a part of PH-34, Part C, Andreanof Island group, Aleutian Islands, Alaska. T-11533 covers that area of Atka Island that includes Banner Point and Banner Bay. It also includes Salt Island and Salt Reef immediately west of Banner Point.

The field operations preceding compilation were limited to the recovery of horizontal control and the determination of elevations to control the nine-lens stereoplotter project vertically. The few field inspection notes were restricted to general descriptions of foreshore and beach characteristics.

The nine-lens compilation of contours was preceded by a graphic compilation of shoreline, foreshore and offshore features for hydrographic survey needs based on the field recovery of horizontal control with little or no field inspection of shoreline and related features.

Contours were compiled on the Reading nine-lens stereoplotter. The contour interval is 50 feet with a first 25 foot contour where contour spacing permitted and where better expression of nearshore configuration could be obtained.

The registered copy under T-11533 will consist of a cronaflex positive and a Descriptive Report.

Photogrammetric Plot Report  
Project 24050 (Aleutian Islands)  
Surveys T-11533 through T-11536 and T-11544 through T-11547

21. Area Covered.- This report discusses the photogrammetric plot for eight  $7\frac{1}{2}' \times 10'$  surveys numbered T-11544 through T-11536 and T-11544 through T-11547 all at a scale of 1:20,000. These surveys cover the southeastern part of Atka Island and the western tip of Amlia Island. Surveys T-11533 through T-11536 are referenced to field identified control and are considered to be accurately fixed in datum. Surveys T-11544 through T-11547 are regarded as preliminary and a subsequent plot based on field identified control will be done.

22. Method.- The plot was laid on vinylite manuscripts at 1:20,000 scale ruled with polyconic projection and UTM 1000-meter grid. The grid was used to junction the manuscripts.

Metal-mounted photographs taken in 1953 and 1954 were used in the plot. Master calibration templets were used in preparing the templets. A paper print for each photograph in the plot was prepared with pass points for field use.

The attached sketch shows photographs, control stations, and tolerances in positions for the plot. All control stations used in the plot fell north of the southern tier of surveys. Thus this tier of surveys (T-11544 through T-11547) were considered preliminary. The plot will be redone for these surveys after control is established. The templets were drilled only in the area of surveys T-11533 through T-11536 which area is considered accurate in position. However a slight shift may occur at the southern limit of these surveys when new control is available.

The plot was completed by first adjusting flights of photographs in surveys T-11533 through T-11536 where control was available. The plot was then extended southward to include the photographs in surveys T-11544 through T-11547. Good closure was achieved throughout the plot. The plot junctioned satisfactorily with a previous plot to the westward.

23. Adequacy of control.- Triangulation stations were identified in the field in 1953 on U.S. Navy single-lens photographs at an approximate scale of 1:25,000 taken in 1951. The distribution of control is shown on the appended sketch.

Sixteen field-identified stations were used to control the plot. Of these, 14 held within 0.3 mm. and two could not be held and are discussed below:



Photogrammetric Plot Report  
Project 24050 (Aleutian Islands)

EGG 1943 (0.5 N of plotted position). This station was described as the top of a pinnacle rock and this point was used in the plot. The field-identified point which fell north of this point would have held.

SPOT 1943 Sub. Sta. (0.4 nm. SE of plotted position) This station was very poorly described and the identification was doubtful. Nearby stations which were well-identified held in the plot.

Triangulation station THUM 1943 was used in the prior plot to the westward and did not hold. A new identification as suggested in the report for this prior plot held to the published position.

24. Supplemental Data. None

25. Photography.- The photography was adequate as to coverage and overlap. A few of the photographs were tilted but it was not necessary to compute a new center to obtain an accurate plot.

Submitted by:

*Jeter P. Battley Jr.*

Jeter P. Battley, Jr.  
Cartographer

Approved:

*Everett H. Ramey*

Everett H. Ramey  
Chief, Graphic Compilation Unit

PHOTOGRAMMETRIC PLOT REPORT  
PROJECT PH-34 ATKA ISLAND  
SURVEYS T-11544 thru T-11547  
JANUARY 1958

(Addendum to Photogrammetric Plot Report for surveys T-11533 thru T-11536 and T-11544 thru T-11547 accomplished January 1957).

21. AREA COVERED

This report discusses the final radial plot for four 7½X10 minute surveys T-11544 thru T-11547, all at a scale of 1:20,000. These surveys cover the southeastern part of Atka Island.

22. METHOD

The plot was laid on vinylite manuscripts at 1:20,000 scale with a ruled ployconic projection and UTM 1000 meter grid. The grids were used to junction the manuscript.

A preliminary plot was previously laid in this area. Datum for the prior plot was established by extending the plot south from well-controlled adjacent surveys to the north. (See original plot sketch).

As requested, field-identified control was furnished for the south shore of Atka Island by the 1957 field party. With this new control, these four surveys were relaid.

Utilizing the previously prepared templets, only this new control station had to be added to the templets.

The plot was laid by extending from the well-controlled northern surveys southward into the new 1957 control. The majority of the new control held well and a strong fix in datum was achieved. With the exception of the S. W. corner of T-11544 on the western end of this plot, no shift from the preliminary plot positions was evident in this plot.

A junction was made with T-11543 which falls due west of this plot.

- 2 -

### 23. ADEQUACY OF CONTROL

The attached sketch shows the density and distribution of control used in the plot. There were 9 newly field identified triangulation stations along with the previous 1953 field-identified stations to the north. All the 1953 stations held as before. (See original plot report filed with this report).

Of the nine 1957 field-identified stations, six held well in the plot. Three could not be held and are discussed herein:

MARCY 1957 (0.5mm S.E. of plotted position) Described as the high point on an island. As the high point was somewhat flat, offering more than one point of the same elevation this station was considered doubtful in identification. Other control held east and west of it.

SUSAN 1957 sub. pt....(0.9mm W.) This sub. pt. is described as center of flat rock outcrop. The field photograph position was used. There is a rock outcrop which would have held in this plot. Three well-defined stations held nearby.

NOSE 1943 sub. pt....(7.0mm W. of plotted position) A comparison of the 1943 planetable board of this area and the 1957 identification card sketch seemed to indicate the wrong position was occupied by field party for this station. Other control held nearby.

### 24. SUPPLEMENTAL DATA

None

### 25. PHOTOGRAPHY

The photography was adequate as to coverage and overlap.

26. VERTICAL CONTROL

Under Item 4, Vertical Control, paragraph "C" in the field inspection report there are listed 17 vertical-control points, P-001 thru P-017. No accompanying field data for these peaks could be located. Therefore, the peaks were not identified on the photographs and added to the plot as the necessary data to compute the elevations were not available.

Submitted by

John P. Battley, Jr.  
J. P. Battley, Jr.  
Cartographer

Approved by

Everett A. Ramey  
E. H. Ramey  
Chief, Graphic Compilation Unit

Addendum No. 2 to the Original Plot Report for  
Atka Island, Alaska PH-34

T-Sheets T-11533 thru 11536 and T-11544 thru T-11547

29 September 1958

22. Method

During the 1958 field season an error was found in the 1957 triangulation positions on the S. shore of Atka Island. Of the seven 1957 control stations in this area (see attached sketch) six were in error enough to be replotted at the 1:20,000 scale of the manuscripts. Two stations, MARCY 1957 and HONEY 1957 were found to be mis-identified and the 1958 field party supplied new field identification. In the case of station HONEY 1957, the misidentification was realized in the original plot and another point was selected which held in the plot. This selection was verified by the 1958 identification.

The plot was relaid on the original manuscripts, utilizing the previously prepared templets. The newly identified position for station MARCY was added on the templets effected. A shift from the original plot positions was realized primarily on T-sheets T-11544 and 11545. The northern sheets T-11533 thru T-11536 and T-11547 held to the original positions. In the areas where this plot shifted from the previously established positions, the templets were redrilled. These new drill holes were circled on the templets for clarification in use by the nine-lens instrument unit. The maximum shift in shoreline positions was approximately 0.6 mm.

23. Adequacy of Control

(See addendum No. 1 to original report)

In addendum No. 1 which covers the plot laid on the 1957 identified control, three stations were listed as not held. Of these two stations MARCY 1957 and SUSAN 1957 sub. pt. were held in this plot. MARCY was reidentified and thus held. The new 1958 position for SUSAN held to the original plot position.

NOSE, 1943 sub. pt. was not held as explained in the first addendum.

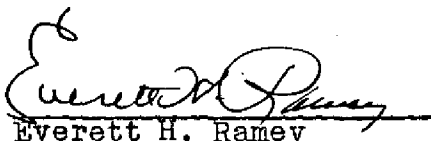
-2-

CLIMB 1957 sub. pt. did not hold in this plot. Although held in the original plot this station was reported as mis-identified by the 1958 field party. No new identification was furnished. In holding this plot to the new positions the previously identified point fell 0.7 mm NW of the plotted position. All other control held.

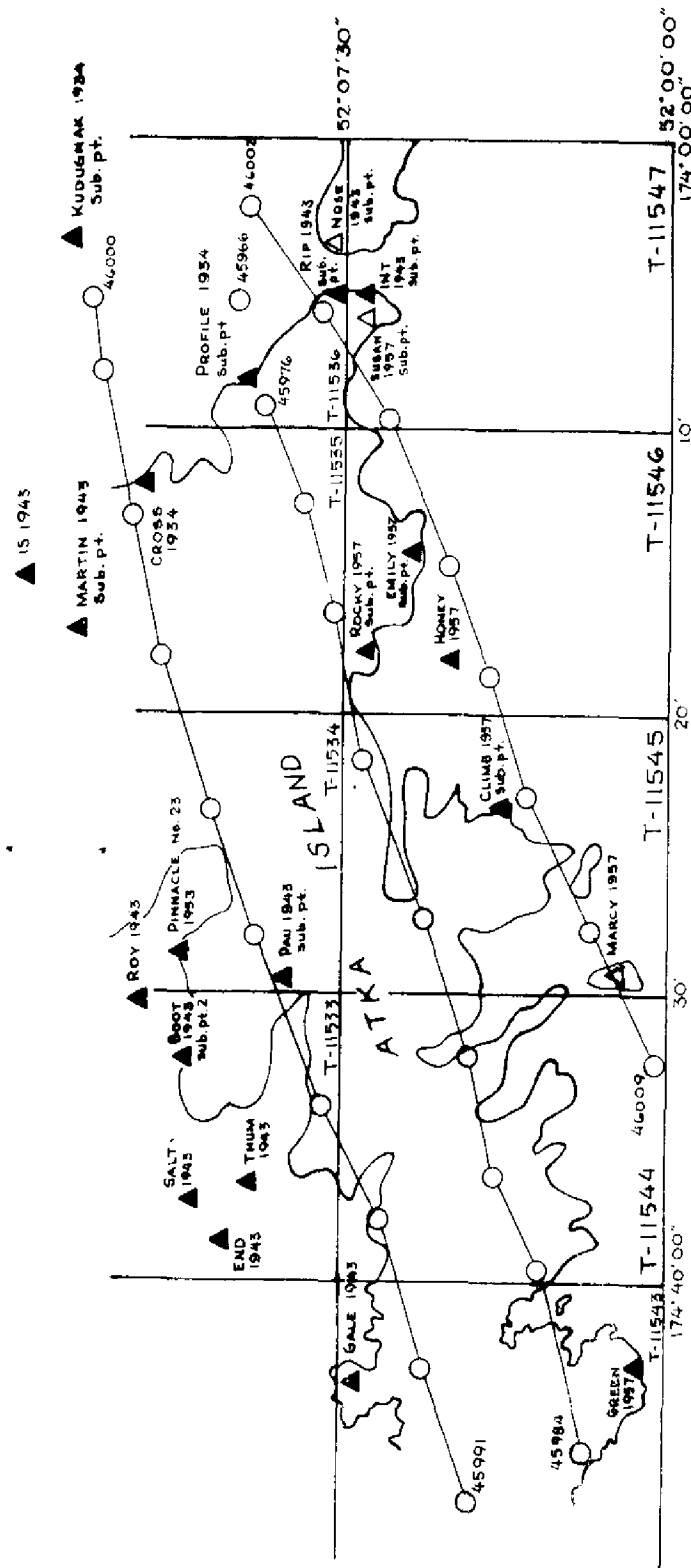
Submitted by

Jeter P. Battley, Jr.

Approved



Everett H. Ramey  
Chief, Graphic Compilation Unit



Ph-34  
PHOTOGRAMMETRIC PLOT SKETCH

JANUARY 1958

- ▲ ..... control held in plot
- △ ..... control not held (see plot report for summary)

SCALE OF MAP..... 1:20,000

PROJECT NO. PH-34

MAP T. 11533...

SCALE FACTOR

[illegible]

1 FT = 3048006 METER

1 FT. = .3048006 METER <sup>F</sup>

1 FT. = .3048006 METER  
F. Ramey  
COMPUTED BY.

DATE 24 July 1956

CHECKED BY R. Sugden

24 July 1956

M. 2388-12



MAP T. 11533 PROJECT NO. PH-34 SCALE OF MAP 1:20,000 SCALE FACTOR

[illegible]

1 FT. = 3048006 METER	DATE	23 January 1957	DATE	24 January 1957
COMPUTED BY	G. Amburn	CHECKED BY	E. Ramey	
		M-2368-12		

Compilation Report  
T-11533

31. Delineation -

The shoreline was delineated stereoscopically from nine-lens photographs taken near M.H.W. Vinylite work sheets on which the shoreline and pass points were drawn were adjusted between the corresponding pass points on the manuscript and the shoreline was transferred. Planetable work at 1:20,000 scale was available and was used to aid in the interpretation of the photographs. There were no field inspection photographs of the area.

The photographs were of good quality and coverage. 1953 and 1954 photographs were used in conjunction but these were taken at near the same time and presented no difficulties. Where scale differences between the photographs and the manuscript occurred the projector was used in compiling detail.

32. Control

Control was adequate both in density and placement for this survey.

33. Supplemental Data - Planetable Surveys

\* T-6918 B, 1943 and T-6919, 1943 at 1:20,000 scale were used as a guide for rock datum and also for better interpretation of the photographs, especially where interpretation was questionable.

34. Contours and Drainage- Metrogon photography by the Navy on 7/21/51, with low tide and calm seas, was used to check doubtful areas

Many of the elevations on planetable surveys T-6919 and T-6918b were in good agreement with the stereo instrument compilation. Where spot elevations agreed within five feet, the planetable elevation was not retained as an unchecked field elevation.

35. Shoreline and Alongshore Details-

Shoreline and alongshore details are office interpreted except as stated in paragraph 33 above. The shoreline is generally very foul with rocks. As the photographs are very clear shallow areas to a considerable depth could be seen and these have been outlined with the shallow symbol.

\* All rock elevations shown inside of parentheses and the kelp symbol are from the planetable surveys. Elevations in brackets are photogrammetrically determined.

36. Offshore Details-

There are a number of offshore rocks and reefs in this area. The shallow area surrounding SALT REEF showed clearly on the photographs even though the nautical chart shows it to be from 2 to 4 fathoms deep.

37. Landmarks and Aids

None

38. Control for future surveys

None

39. Junctions

Junction was made with adjoining sheets T-11534 to East and T-11544 to South

40. Horizontal and Vertical Accuracy

a. Horizontal - No deficiencies are indicated.

b. Vertical - - Water elevation, corrected from tide data, was used for vertical control

41 - 45 Inapplicable

46. Comparison with Existing Maps-

Planetable surveys T-6918 b and 6919, 1943, 1:20,000  
There is generally good agreement between the two surveys. There are a few instances of rocks awash, shown on the planetable work which could not be seen on the photographs. Positions of rocks along the northern shore check closely but there is considerable difference between the position of the shoreline. Photographs and control are good in this area.

47. Comparison with Nautical Charts-

No 9136- Karovin Bay to Wall Bay, Oct. 1943, Revised Jan. 52,  
Scale 1:40,000

No 8862 scale 1:300 000 corrected 10/15/51

Page 3

No significant differences were noted.

Items to be applied to Nautical Charts immediately - None

Items to be carried forward - None

Respectfully submitted:

*Robert L. Sugden*  
Robert L. Sugden

Approved

*Everett H. Ramey*  
Everett H. Ramey  
Chief, Graphic Compilation Unit

Topographic section of report  
submitted by:

*Clarence Misfeldt*  
Clarence Misfeldt  
Cartographer

Approved

*Louis Levin*  
Louis Levin  
Chief, Nine lens Stereo Unit



48. Geographic Names List

- > Andreanof Islands - (Title)
- > Banner Bay
- > Banner Point
- > Bering Sea
- > Salt Island
- > Salt Reef
- > Starichkof Reef
- > Atka Island

Names approved  
Aug. 16, 1971

Frank W. Fickett

Review Report  
T-11533  
Topographic Map

61. General Statement

Graphic compilation of shoreline was completed in 1957 to fulfill hydrographic survey needs. This shoreline compilation was followed by a separate contouring operation done on the Reading nine-lens plotter and completed in 1960. The contour interval was 50 feet with a first 25-foot contour.

62 through 65. Comparison With Other Surveys

The map manuscript was compared with all prior registered topographic surveys, maps of other agencies, contemporary hydrographic surveys and nautical charts during compilation. Discrepancies and conflicts between the map manuscript and the prior surveys were resolved at the time comparisons were made.


66. Adequacy of Results and Future Surveys


Shoreline and related features, including contours, are considered to be delineated adequately, although field work was limited almost entirely to photoidentification of horizontal and vertical control.

Reviewed by:

  
K. N. Maki 8/14/71

Approved by:

  
Charles Theurer, Chief  
Photogrammetric Branch

  
Jack E. Guth, Chief  
Coastal Mapping Division