

7033a

Diag'd. on Diag. Ch. 8865

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

## DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC

Field No. SU-A-46 Office No. T-7033 a

### LOCALITY

State ALASKA - ALEUTIAN ISLANDS

General locality WEST END OF AGATTU ISLAND

Locality .....

194 6

CHIEF OF PARTY

A. P. Ratti

LIBRARY & ARCHIVES

DATE MARCH 6, 1947

B-1870-1 (1)

7033a

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO.

T7033a

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. SU-A-46

REGISTER NO. T-7033 a

State Alaska, Aleutian Islands

General locality ~~Agattu Island~~ Near Is.

Locality West End of  
Southwest corner Agattu Island

Scale 1:20,000 Date of survey May to Sept., 19 46

Vessel Ship SURVEYOR

Chief of party A. P. Ratti

Surveyed by H. O. Fortin

Inked by H. O. Fortin

Heights in feet above \_\_\_\_\_ to ground to tops of trees

Contour, Approximate contour, Form line interval \_\_\_\_\_ feet

Instructions dated March 21, 19 46

Remarks: Graphic Control Survey - Shoreline

added from air-photographs



Descriptive Report to Accompany

Topographic Sheet (SU-A-46) T-7033 a

Agattu Island - W. side Otkriti Bay to E. side Armeria Bay

Ship SURVEYOR, A.P. Ratti, Comdg.

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Instructions:

Basic Instructions for Project CS-218, dated February 3, 1938;  
Supplemental Instructions dated February 1, 1944 and January 29, 1945; and  
Specific Instructions for sub-project #30, issued by the Liaison Officer  
dated March 21, 1946.

Limits and Junctions:

(T70316)  
The survey joins EX-B-46 at triangulation station DOWN 1946 and EX-D-46 (T-70326)  
at triangulation station MERIA 1945, covering the S.W. corner of Agattu Island  
from Long.  $173^{\circ} 21' E$  to  $173^{\circ} 34' E$ .

General:

Standard methods of graphic control surveys were used with short traverses between stations; the longest being that between triangulation stations MERIA and ERA.  
All checked within the allowable limit.

In general, the shoreline is quite rugged, with ledges extending from 50 to 100 meters offshore.

Small sand banks were found at the mouth of streams. Extensive kelp beds were encountered on the south and east sides of Armeria Bay and northwest of Gillon Point.

Control:

Stations DOWN, QUID, BELL, ABLE, NILE, MINT, LION, END, FLAG, BLACK, MOSS, INTER, ERA, OBOE, AND MERIA furnished control for this sheet. Station KING is a marked topo station located by topo. Station BOBOE is a marked triangulation station located by topo.

*Descriptions of recoverable stations on file in photogrammetry.*

Geographic Names:

Armeria Bay, Armeria Point and Gillon Point are charted names. 414✓

West Cove is mentioned in the Special Aleutian Islands Coast Pilot Edition (1944) as being on Chart 8865. No such name was found on that chart. It is believed that it is the same cove as the Navy now calls Hour Hand Cove.

Nile Point was the name suggested for the prominent point where triangulation station NILE is located. The rugged shoreline in this area is suggestive of pictures of the upper Nile River in Africa.

Landmarks for charts:

There are no conspicuous landmarks in the area covered by this survey.

Air-photos:

Flight numbers:	1-8-1 to 1-8-6
	2-7-1 to 2-7-14
These pictures are	2-8-1 to 2-8-8
on scale 1:10,000	3-7-1 to 3-7-9
flown by the Naval	4-7-1 to 4-7-11
Air Station, Attu,	6-8-1 to 6-8-9
Alaska in 1946 for	6-10-1 to 6-10-2
the ship SURVEYOR	7-8-1 to 7-8-8
and cover the area	8-8-1 to 8-8-4
of this survey.	9-8-1 to 9-8-4
	13-14-1 to 13-14-9
	14-14-1 to 14-14-17
	15-14-1 to 15-14-7

All off-lying reefs, rocks and ledges fringing the shoreline have been clearly marked with their respective heights and stages of uncovering at certain stages of tide on the above flight of photos.

No attempt was made to locate on the topo sheet all the detail as marked on the photos.

Approved,

Commanding Officer,  
U.S.C. & G.S. Ship SURVEYOR

Respectfully submitted,

*Henry O. Fortin*  
Henry O. Fortin, Lt. Comdr.  
U.S.C. & G.S. Ship SURVEYOR



## Shoreline Compilation 7033a

The details shown in green have been added to this Graphic Control Sheet from field inspected photographs. These photographs, while not field inspected as completely as desired, have furnished enough information so that office interpretation of the remaining details can be considered to be accurate. Where the hydrographic survey verification is subsequent to this compilation, any discrepancies that may occur should be brought to the attention of the Division of Photogrammetry and at that time a more accurate interpretation may be determined in view of the additional information.

There are three sets of photographs available for this compilation - 1:10,000, 1:15,000, and 1:26,000. The 1:10,000 Navy photographs were field inspected by A. P. Ratti, Chief of Party. They gave complete coverage for the area and were used in the radial plot and compilation.

The radial plot was laid on the 1:20,000 graphic control board. The following triangulation and substitute stations with the topographic stations were used in the plot: Meria, 1945; Era, 1944; Flag, 1946; Sub. Station Mass, 1946; Inter, 1945; Sub Station Lion, 1946; Sub. Station Mint, 1946; Nile, 1946; Sub. Station Boboe; Able, 1946; Bell, 1946; Quid, 1946; and Down, 1946.

The plot held to the control well except in the area between topographic stations Cab and Gag, but is believed to be of standard map accuracy.

The detail was compiled in the projector on the 1:20,000 graphic control board. All work shown in green has been added from 1946 field inspected photographs. This sheet was compiled in June 1947.

Office interpretation with field inspection data has been applied with conventional symbols to shoreline and offshore features. Office interpretation was used in compiling the bluff line. No M.L.L.W. line was indicated on the photographs.

The accuracy of the compilation is in keeping with the graphic control and is considered of an accuracy not to exceed 1 mm. of its true horizontal position with the exception of the area between topographic stations Cab and Gag mentioned above.

No inshore hydrographic work had been done within the confines of this sheet at the time of this shoreline compilation; thus no reconciliation between two surveys could be made.

Compiled by: J. H. Blankinship

Verified by: L. C. Lande

Sept. 1947

The 1946 seasons' report "Field Inspection of Air Photographs by A. P. Ratti, Chief of Party on the ship SURVEYOR is filed in the Library under Acc. # 1946/132.

Shoreline where shown in green ink supersedes that shown in black. SGB.



## NAUTICAL CHARTS BRANCH

SURVEY NO. 7033a

### Record of Application to Charts

[illegible]

M.2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

# GEOGRAPHIC NAMES

Survey No.

T-7033a

Name on Survey

	A	B	C	D	E	F	G	H	K	
Aleutian Islands			(for title)							1
Otkriti Bay		"	"						USGB	2
										3
Agattu Island									USGB	4
Gillon Pt.									"	5
West Cove										6
Armeria Pt.									USGB	7
Armeria Bay										8
Nile Pt.										9
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Names underlined in red are approved. 9/30/48 L. Heck



DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF TOPOGRAPHIC SURVEY

REGISTRY NO. T-7033a

FIELD NO. SU-A-46

Alaska-Aleutian Islands, West End of Agattu Island  
Surveyed in May - September, 1946      Scale 1:20,000  
Instructions dated March 21, 1946

Plane Table Survey

Aluminum Mounted

Chief of Party - A. P. Ratti  
Surveyed by - H. O. Fortin  
Inked by - H. O. Fortin  
Reviewed by - I. M. Zeskind, October 6, 1948  
Inspected by - R. H. Carstens

1. The control for the present survey is based on triangulation accomplished from 1943 to 1946. The shoreline in green was added in 1947 from field inspected air photographs as discussed in the report on Shoreline Compilation attached to the Descriptive Report. A formal review of the present survey is considered unnecessary.
2. A comparison of the present survey with H-7145 (1946) on the south and west and H-7144 (1946) on the north reveals no discrepancies in shoreline or low-water detail.
3. There are no prior topographic surveys of Agattu Island by this Bureau. The shoreline on Chart 9147 originates with the present survey prior to verification and review. A comparison of the present survey with the first edition of the original compilation of this chart reveals no discrepancies. The contours on this chart originate with sheets Nos. 3 and 4 of the Agattu Island Quadrangle, Corps of Engineers, U. S. Army.

4. The two observations of the magnetic meridian agree closely with the charted values:
5. Adequate junctions were made with T-7031b (1946) on the southeast and T-7032b (1946) on the northeast.



7033

b

7033 B

Diag'd.on Diag. Ch. No. 8865

Form 504

## U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

## DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHICField No. SU-B-46 Office No. T-7033 b

## LOCALITY

State ALASKA - Aleutian IslandsGeneral locality Attu Island  
ALEUTIAN ISLANDSLocality ATTU ISLANDN. Coast Attu - Red Head to Earle Cove1946

## CHIEF OF PARTY

A. P. RattiSURVEYOR

## LIBRARY &amp; ARCHIVES

DATE MAR 6 1947

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. SU-B-46

REGISTER NO. T-7033 b

State Alaska, Aleutian Islands

General locality Attu Island, Near Is.

Locality N. Coast Attu, Red Head to Earle Cove

Scale 1:20,000 Date of survey July, 1946

Vessel Ship SURVEYOR

Chief of party A. P. Ratti, Comdg. Officer

Surveyed by H. O. Fortin

Inked by H. O. Fortin

Heights in feet above \_\_\_\_\_ to ground to tops of trees

Contour, Approximate contour, Form line interval \_\_\_\_\_ feet

Instructions dated March 21, 1946

Remarks: Graphic Control Survey

T7033 b



Descriptive Report to Accompany

Topographic Sheet SU-B-46

Attu Island - Red Head to Earle Cove

Ship SURVEYOR, A.P. Ratti, Comdg.

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Instructions:

Basic Instructions for Project CS-218, dated February 3, 1938;  
Supplemental Instructions dated February 1, 1944 and January 29, 1945; and  
Specific Instructions for sub-project No. 30 issued by the Liaison Officer  
and dated March 21, 1946.

Limits and Junctions:

The survey joins SU-C-46<sup>T-7034</sup> at triangulation station RUTH 1946 on the east side  
of Earle Cove and extends eastward to a junction with EX-D-44 (T-6971 A) at  
Red Head on the west side of Steller Cove.

General:

Standard methods of graphic control were used and resecting was possible on  
all short traverses.

In general, the beach line consisted of gravel and boulders fringed with  
black rock reefs extending outward between fifty and one hundred meters. How-  
ever, between signals KID and GAL the beach is very sandy with off-lying reefs  
extending out to triangulation station PART 1946. Fairly large streams enter  
the cove near signals JIM, JAY, and IDA. During severe storms the mouths of  
these streams may shift to different positions.

The off-lying reefs and rocks are fringed by heavy kelp beds, and only  
small boats should approach the entire shoreline and should use extreme care.

Control:

Stations HEAT, PART, DORIS and RUTH were located by ship-to-shore triangulation  
in July 1946. Triangulation station SAND 1946 was located by intersection;  
stations REST and VANCE by graphic control in 1946; and station PRIT by triangula-  
tion in 1944. The foregoing furnished the control for this survey.

Magnetics:

One declinatoire magnetic reading was taken at station VANCE.

Place Names:

Steller Cove and Red Head are charted names.

Landmarks:

There are no conspicuous landmarks in this area covered by this survey.

Air Photos:

A special report on field inspection of air-photos will be submitted under separate cover.

Flight numbers 3-124 to 3-156, scale 1:10,000, flown by the Naval Air Station, Attu Alaska in 1945 for the ship EXPLORER, cover the area of this survey.

All off-lying reefs, rocks and ledges fringing the shoreline have been clearly marked with their respective heights on the above flight of photos.

No attempt was made to locate on the topo sheet all the detail as shown on the photos.

Respectfully submitted,

*Henry O. Fortin*  
Henry O. Fortin, Lt. Comdr.  
U.S.C. & G. Survey  
Ship SURVEYOR

Approved,

Comdg. Officer  
U.S.C. & G.S. Ship SURVEYOR



Shoreline Compilation 7033b

The details shown in green have been added to this Graphic Control Sheet from field inspected photographs. These photographs, while not field inspected as completely as desired, have furnished enough information that office interpretation of the remaining details can be considered to be accurate. Where the hydrographic survey verification is subsequent to this compilation, any discrepancies that may occur should be brought to the attention of the Division of Photogrammetry and at that time a more accurate interpretation may be determined in view of the additional information.

There are two sets of photographs available for this compilation - 1:10,000 and 1:26,000. The 1:10,000 photographs were used in the compilation. They were taken in 1945 by Naval Air Station personnel and field inspected by A. P. Ratti in 1946.

The detail was compiled in the projector on the 1:20,000 graphic control board in July 1947. All detail shown in green ink has been added from the 1946 field inspected photographs mentioned above.

All of the triangulation stations and topographic stations were used in the compilation, with the exception of topographic station Ado.

Office interpretation with field inspection data has been applied with conventional symbols to shoreline and offshore features. No M.L.L.W. line was indicated on the photographs. *Shoreline where shown in green supersedes that shown in black. ~~Black shoreline deleted.~~*

No radial plot was laid. The accuracy of the compilation is in keeping with the graphic control and is considered of an accuracy not to exceed 1 mm. of its true horizontal position, with the exception of the bluff line.

No hydrographic sheet covering this area was available at the time of this compilation, thus no reconciliation between two surveys could be made.

*Comparison with contemporary hydrographic sheets made 11/22/48*

Compiled by

S. B. Blankenhorn

Verified by

L. C. Lande

Division of Photogrammetry  
Graphic Compilation Section

*Sept. 1947*

*The 1946 seasons' report "Field Inspection of Air Photographs" by A.P. Ratti, Chief of Party on ship SURVEYOR, is filed in the Library under Acc. # 1946/132.*



DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF TOPOGRAPHIC SURVEY

REGISTRY NO. T-7033b

FIELD NO. SU-B-46

Alaska-Aleutian Islands, Attu Island, Red Head to Earle Cove  
Surveyed in July 1946 Scale 1:20,000  
Instructions dated March 21, 1946

Planetable Survey

Aluminum Mounted

Chief of Party - A. P. Ratti  
Surveyed by - H. O. Fortin  
Inked by - H. O. Fortin  
Reviewed by - I. M. Zeskind, November 30, 1948  
Inspected by - R. H. Carstens

1. The control for the present survey is based on ship-to-shore triangulation accomplished in 1944 and 1946. The shoreline in green was added in 1947 from field inspected air photographs as described in the report on Shoreline Compilation attached to the Descriptive Report. A formal review of the present survey is considered unnecessary.
2. The junctions with T-6971a (1944) on the east and T-7034 (1944) on the west are adequate.
3. A comparison of the present survey with H-6867 (1945) reveals no discrepancies in shoreline or low-water detail.
4. There are no prior topographic surveys of Attu Island by this Bureau. The shoreline on Chart 9198 (latest print date 6/16/47) originates with the Corps of Engineers quadrangles as shown on Blueprint 37851 (1943). Although Chart Letter 885 (1943) describes the control for the charted shoreline as weak, remarkable agreement in azimuth and geographic position exists between the charted and present shoreline. However, the shoreline on the small-scale chart is generalized and lacks the detail shown on the present large-scale survey. The present shoreline is adequate to supersede the charted shoreline.

5. The declinatoire value for magnetic variation on the present survey is in substantial agreement with the charted value.

# GEOGRAPHIC NAMES

Survey No. T-7033b

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
Alaska			(for title)							1
Aleutian Islands			" "							2
Bering Sea								USGB		3
Attu Island								USGB		4
Red Head								"		5
Steller Cove								"		6
Earle Cove										7
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Names underlined in red are  
approved. 11/26/48 L. Heck.