

7032 a

~~Graphic Control~~

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

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey GRAPHIC CONTROL

Field No. EX-C-46 Office No. T-7032 a

LOCALITY

State ALASKA

General locality ALEUTIAN ISLANDS

Locality S. E. END of AGATTU ISLAND

194 6

CHIEF OF PARTY

F. L. Gallen

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DATE MAR 6 1947

8-1870-1 (1)

7032 a

~~Graphic Control~~

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

77032a

~~GRAPHIC CONTROL~~
~~TOPOGRAPHIC~~ TITLE SHEET
Topographic

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. EX-C-46

REGISTER NO. T-7032 a

State Alaska - Aleutian Islands

General locality Agattu Island

Locality *Cape Sabak to Patricia Pt.*
Southeastern end

Scale 1:20,000 Date of survey June, August, 1946

Vessel U.S.C. & G.S.S. EXPLORER

Chief of party F. L. Gallen

Surveyed by J. C. Ellerbe, A. L. Wardwell

Inked by J. C. Ellerbe, A. L. Wardwell

Heights in feet above MHW to ground ~~to tops of trees~~

Contour, Approximate contour, Form line interval 500 feet

Instructions dated Feb. 3, 1938 - Apr. 16, 1943, 1943

Remarks: _____

DESCRIPTIVE REPORT

to accompany

GRAPHIC CONTROL SHEET

Field No. EX-C-46

ALEUTIAN ISLANDS - AGATTU ISLAND

SOUTHEASTERN END

Ship EXPLORER

F. L. Gallen, Comdg.

AUTHORITY:

Original instructions for Project CS-218. ✓

PURPOSE:

To locate signals for hydrographic control in nearby areas. ✓

CONTROL:

Triangulation of 1946 - EXPLORER.

Part of the work on the south side was done in advance of the triangulation and adjusted to triangulation stations at a later date. ✓

DATUM:

GANNETT, 1934.

SURVEY METHODS:

At the time of the beginning of this sheet, no triangulation control was available. Therefore the planetable positions of stations SADE, CORA, IBEX, and RADIO TOWER as determined on sheet EX-B-46, and the orientation lines from SADE to KOHL and RADIO MAST were reduced in scale to 20,000 and plotted on a blank sheet. The planetable was then set up at KOHL, oriented on the line to SADE, and resection on CORA, IBEX, and RADIO MAST determined the relative position of that station. Cuts were then

T-70316 (1946) ✓

taken to all stations and signals along the coast to Cape Sabak. The position of JEWEL was determined by setting the planetable eccentrically on the extension of the orientation line from KOHL and resecting on SADE and CORA, then measuring the eccentric distance to JEWEL along the azimuth line to KOHL. Hydrographic signals in the vicinity of JEWEL were then rodded in, and cuts to SABAK, HIGH, and SURF drawn on the sheet.

No work was done on the sheet subsequent to the above until after the triangulation was completed.

Planetable positions of KOHL, JEWEL, SURF, SABAK, and RADIO MAST furnished the basis for adjustment to the triangulation as plotted on Sheet C. ^{T-7032.2 (1946)} Tracing of the planetable work was laid on the plotted triangulation, and it was found that the two sets of positions were so closely in agreement that no adjustment of other work was necessary.

Bad weather prevented further field work on this sheet; therefore, in order to complete locating the signals, the cuts to them from KOHL were transferred to the hydrographic sheet, and other cuts obtained by sextant angles from a number of positions offshore, using triangulation stations as prime objects. These cuts were later plotted with a steel protractor on the topographic sheet, intersection with the original planetable cuts giving the accepted positions of the signals.

The shoreline between Cape Sabak and signal TAR was of a very difficult nature, mainly cliffs rising abruptly from the water. Even under the best weather conditions, landing was out of the question in the greater

part of this area. Therefore, all signals established here were cut in by the ship and launch hydrographic parties, and have been shown as hydrographic signals on the field sheets. *H-7139(1846)*

In the area between TAR and QUIT, the planetable was set up at the latter station and a short traverse run to locate the signals in the area. No closure was made, since time and weather would not permit rerunning the traverse to close on the starting point. Resection on QUIT from TAR, however, checked the azimuth and rodded distance of TAR along the traverse.

AIR PHOTOGRAPHS:

No photographs were available at the time field work on this sheet was done. Those obtained later were field inspected near the end of the season.

MAGNETICS:

Declinatoire readings taken with declinatoire No. 254 were obtained at Δ s KOHL and JEWEL. Scaled declinations at these stations are as follows:

KOHL - $2^{\circ} 38' E.$

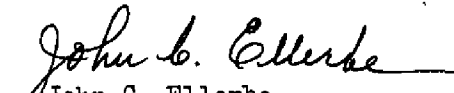
JEWEL - $2^{\circ} 36' E.$


Standardization of declinatoire No. 254 at Magnetic Station SEWARD on December 17, 1946, at 1130 indicated no error. (See Report of Magnetic Observations, EXPLORER, December 17, 1946.)

STATISTICS:


Statute miles of graphic control: 5.8

Respectfully submitted:


John C. Ellerbe
H & G Engr., C&GS


Arthur L. Wardwell
H & G Engr., C&GS

Forwarded, Approved:


H. Arnold Karo
Comdg. Ship EXPLORER

Shoreline Compilation 7032a

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 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 F. L. Gallen, Chief of Party, gave complete coverage for the area, and were used in the radial plot and compilation. The photographs were taken in May 1946 by Naval Air Station personnel based on Attu.

The radial plot was laid on the 1:20,000 graphic control board. The following triangulation stations were used with hydrographic stations transferred from H-7039 (1746) and topographic stations already on the graphic control board - Roof, 1946; Quit, 1946; Prom, 1946; High Pinn. Rock, Cape Sabak, 1946; Loud, 1946; Kite, 1946; Jewel, 1946; Surf, 1946; Kohl, 1946. The plot would not hold to Sabak, 1946.

There was no control between triangulation stations Prom, 1946 and Sabak, 1946 on the graphic control board. The following hydrographic stations taken from H-7039 (1746) and transferred to the graphic control board were used as control in bridging the area between triangulation stations Prom, 1946 and Sabak, 1946 - Gal, Fit and Cow.

The following hydrographic stations were transferred from H-7039 to the graphic control board and used as control for the plot - Pat, Mik, Now, Pin, Jar, and Tom.

The triangulation station Surf, 1946 was field inspected and used in the plot; however no M.H.W. line was field inspected on the photographs for the island.

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

Office interpretation with field inspection data has been applied with conventional symbols to shore-line and offshore features. Office interpretation only was used to compile the bluff line. ✓

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 exception of the area between triangulation stations Prom and High Pinn. Rock, Cape Sabak, 1946 mentioned above. ✓

Reconciliation between this survey and H-7139 (746) has been made and no appreciable conflicts were found. ✓

Compiled by S. H. Blankenship

Verified by L. C. Lande

*Chief Graphic Compilation Section
Division of Photogrammetry.*

Sept. , 1947

*No seasonal report for field inspection
of air photographs was submitted for the
photographs covering this sheet.*

7032 b

7032 b

~~Graphic Control~~

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

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey GRAPHIC CONTROL

Field No. EX-D-46 Office No. T-7032 b

LOCALITY

State ALASKA

General locality ALEUTIAN ISLANDS

Locality N. E. END of AGATTU ISLAND

194 6

CHIEF OF PARTY

G. L. Gallen

LIBRARY & ARCHIVES

DATE MAR 6 1947

9-1870-1 (1)

7032 b

Graphic Control

DESCRIPTIVE REPORT

to accompany

GRAPHIC CONTROL SHEET

Field No. EX-D-46

ALEUTIAN ISLANDS - AGATTU ISLAND

NORTHEASTERN END

Ship EXPLORER

F. L. Gallen, Comdg.

AUTHORITY:

Original instructions for Project CS-218. ✓

PURPOSE:

To locate signals for hydrographic control in near by areas. ✓

To supplement field inspection of air photos of the area.

CONTROL:

Triangulation of 1944, 1945, and 1946. ✓

DATUM:

GANNET, 1934.

SURVEY METHODS:

Signals on the Southeastern side of the sheet were located partially by planetable cuts, partially by traverse, and partially by triangulation cuts. While occupying Δ Stations FROM, WALD, and DONA, the observing party took cuts to all visible whitewashes. these cuts were plotted on the planetable sheet before going into the field. ✓

$\phi 52-28.16' \lambda 173-42.38'$

The planetable was then set up at DONA and a traverse began to the Southward. Additional cuts were taken to signals to the Northward from set-ups along the traverse, and at least three cuts were obtained to all signals except \odot YEL, to which two additional cuts were later obtained by the hydrographic party. ✓

$\phi 52-30.46' \lambda 173-46.07'$

from off shore. The traverse was closed flat on Δ QUIT.

Between Δ stations YAK and GLO, the following procedure was followed: The table was set up at GLO, oriented on PAT, and a direction drawn to a large rock just off shore of \odot FIG. The table was then set up on this rock, oriented on GLO, and resection on AGAT gave the starting point for a traverse in either direction. Closure to the Eastward was made flat on YAK, and closure to the Westward flat on GLO.

In the section between Δ GLO and Patricia Point, the table was set up at HOT, oriented on GLO, and cuts taken to all visible whitewashes. The cut to \odot WOW was drawn as an orientation line. The table was then set up at GLO and intersections obtained on all signals visible therefrom.

Orientation lines were drawn to \odot WOW from this station also. The table was then set up at WOW, and cuts taken to all stations. \odot YOU was located at this point by direct rod reading. A short distance remained, between GLO and \odot EGO, in which only one cut could be obtained. Therefore, a short traverse was run from GLO, closing flat on EGO, which had been located by excellent intersection of three cuts.

A short traverse was begun on a three point fix near \odot VAG and carried to \odot EKE, where resection on PAT and MERIA checked the traverse position. From this set up, cuts were obtained on most of the signals as far as Δ MERIA. Orientation lines were drawn at the same time to two additional set-up points, one between \odot s JIL and LOC, and one on the bluff above \odot ORB. Position of the planetable at the former was obtained by resection on Δ MERIA, and a rod reading to the second taken from there. An additional set up was necessary just off \odot LOC to obtain cuts to signals in the bight to the Southward. The position at \odot ORB was then occupied, and cuts obtained to signals between LOC and EKE, also to the Westward as

checks on the signals there. A last set up was made at OWAC, which had been located by three cuts; resection on MERIA checked its location. From this set up, cuts were taken to signals between LOC and EKE, and signals AIR and ZOR located directly by rod reading.

It was felt that use of any method or combination of methods which would satisfy the prescribed standards of accuracy was justified in this work, since there were so few days when landings could be made, and since the shoreline was of such a nature that long traverses were quite difficult. Wherever possible, signals were located by 3 cuts, or checked by rod reading.

A few points which possibly will assist in control of air photos were located in the area and are labeled on the sheet.

Since all traverses were short and checked flat, no adjustments were necessary.

AIR PHOTOGRAPHS:

No photographs were available at the time this work was done - those of the area obtained later were field inspected near the end of the season.

MAGNETICS:

Declinatoire readings taken with declinatoire No. 254 were obtained at Δ s QUIT, DONA, HOT, and GLO. Scaled declinations at these stations are as follows:

QUIT	2°-04' E
DONA	3°-34' E
HOT	2°-00' E
GLO	1°-48' E

It will be noted that a violent magnetic storm was in progress at HOT

Reconciliation between this survey and H-7139 has been made and no appreciable conflicts were found.

Compiled by J. D. Blankenship

Verified by L. C. Lande

Division of Photogrammetry
Graphic Compilation Section

Sept. 1947

No field inspection season's report was submitted for the photographs covering this sheet.

Reconciliation between this survey and H-7139 has been made and no appreciable conflicts were found.

Compiled by J.D. Blankenship

Verified by L.C. Lande

Division of Photogrammetry
Graphic Compilation Section

Sept. 1947

No field inspection season's report was submitted for the photographs covering this sheet.

GEOGRAPHIC NAMES

Survey No.

T-7032 a & b

Name on Survey

On Chart
No.

On previous survey
No.

On U. S. quadrangle
Maps

From local
information

On local Maps

P. O. Guide or Map

Rand McNally Atlas

U. S. Light List

A

B

C

D

E

F

G

H

K

Alaska

(for title)

1

Aleutian Islands

"

"

2

Agattu Island

USGB

3

Kohl Island

"

4

Cape Sabak

"

5

Aga Cove

6

McDonald Point

U S G B

7

McDonald Cove

"

8

Monolith Point

9

Krugloi Point

USGB

10

Patricia Bight

"

11

Patricia Point

"

12

Binnacle Bay

13

14

15

Names underlined in red are
approved. 3/4/48 L.H.

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23

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DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF TOPOGRAPHIC SURVEY

REGISTRY NO. T-7032a & b

EX-C-46

FIELD NO. EX-D-46

Alaska-Aleutian Ids., Agattu I., Cape Sabak to Patricia Pt.
Surveyed in June - September, 1946 Scale 1:20,000
Project No. CS-218

Planetable Survey

Aluminum Mounted

Chief of Party - F. L. Gallen
Surveyed by - J. C. Ellerbe and A. L. Wardwell
Inked by - J. C. Ellerbe and A. L. Wardwell
Reviewed by - R. H. Carstens, March 4, 1948
Inspected by - R. H. Carstens

The shoreline has been transferred to these topographic sheets from air photographs. No formal review is considered necessary.

The shoreline on chart 9126 (Latest print date 12/9/46) originates with U. S. Navy air photographic surveys shown on Bps. 36507-08. The geographic positions of charted shoreline features especially in the vicinity of Cape Sabak and to the westward differ from the present survey positions by as much as 0.25 mile. The control on the Navy surveys is probably in error and the shoreline from these surveys should, therefore, be superseded by the present shoreline for charting.

The shoreline on chart 9198 (print date 6/16/47) originates with Corps of Engineers (USE) Quadrangles of Agattu Island 1943. The shoreline on this small-scale chart is generalized and agrees adequately with the present survey.

NAUTICAL CHARTS BRANCH

SURVEY NO. T 7032 a, b.

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.