

8619

Diag'd. on Diag. Ch. No. 8502-3

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. CS-317 Office No. T-8619

LOCALITY

State Alaska

General locality Alaska Peninsula

Locality Amber Bay to Nakalilok Bay

1941-'44

CHIEF OF PARTY

S.B.Grenell

LIBRARY & ARCHIVES

DATE

June 2 - 1949

B-1870-1 (1)

8619

DATA RECORD

T-8619

Quadrangle (II):

Project No. (II): CS-317

Field Office:
Seattle, Washington

Chief of Party: S. B. Grenell

Compilation Office:
Baltimore Photogrammetric OfficeChief of Party: Louis J. Reed, Stereoscopic
Mapping Section, Wash., D.C.
William F. Deane

Instructions dated (II III):

February 27, 1945, February 29, 1944, August 21, 1946 (Supplemental)

Copy filed in Descriptive:

Report No. T-XXXXX(VI)xx
General Files of the Division
of Photogrammetry

Completed survey received in office:

October 23, 1946

Reported to Nautical Chart Section: October 30, 1946

Reviewed: Jan. 1949 Applied to chart No. 8802 Date: 5/2/47

Redrafting Completed: 3-23-50

Registered: Feb. 10, 1949

Published:

Compilation Scale: 1:20,000

Published Scale:

Scale Factor (III): 1.000

Geographic Datum (III): N. A. 1927 Datum Plane (III): M.S.L.

Reference Station (III): LONG, 1944 Vol. 5, Pg. 79

Lat.:

Long.:

Adjusted
Unadjusted

State Plane Coordinates (VI):

X =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
06118 to 06120 incl.	8/5/41	1525	1:20,000	4.2" above MLLW
06136 to 06139 "	8/5/41	1525	1:20,000	4.2' above MLLW
10959	9/5/42	1312	1:20,000	4.6' above MLLW

Tide from (III): Predicted Tide Tables, Pacific Ocean and Indian Ocean 1941 and 1942. Reference Station - KODIAK, ALASKA with corrections to

Mean Range: Chignik, Anchorage Bay ~~Spring~~ Range: 8.7'
6.6' Diurnal

Camera: (Kind or source) United States Coast and Geodetic Survey nine lens camera. Focal length 8 $\frac{1}{2}$ ". All negatives are on file in the Washington Office.

Field Inspection by: Lt. Comdr. S.B.Grenell date: June-August 1944

Field Edit by: None date:

Date of Mean High-Water Line Location (III):

Same as date of photographs taken in August 1941 September 1942 and supplemented by the field data obtained during June to August 1944.

Projection and Grids ruled by (III) S.R. date: 4-3-46

" " " checked by: S.R. date: 4-3-46

Control plotted by: Frank J. Tarcza date: 4-9-46

Control checked by: E.L.Bauman date: 4-10-46

Radial Plot by: Frank J. Tarcza date: May 1946

Detailed by: Ruth E. Rudolph date: 7-18 to 9-24-46

Reviewed in compilation office by: Raymond Glaser date: 10-9-to 10-14-46

Elevations on Field Edit Sheet
checked by: date:

STATISTICS (III)

Land Area (Sq. Statute Miles): $1\frac{1}{2}$

Shoreline (More than 200 meters to opposite shore): $45\frac{1}{2}$ statute miles

Shoreline (Less than 200 meters to opposite shore): $17\frac{1}{2}$ statute miles

Number of Recoverable Topographic Stations established: 4 by radial plot
13 by planetable

Number of Temporary Hydrographic Stations located by radial plot: 8 (selected and described by compilation office)

Leveling (to control contours) - miles:

Roman numerals indicate whether the item is to be entered by, (II) Field Party, (III) Compilation Party, or, (VI) the Washington Office.

When entering names of personnel on this record give the surname and initials (not initials only).

Remarks:

Preface to Descriptive Report T-8619

Project CS-317

Alaska Peninsula

T-8619 is one of six topographic maps in project CS-317 located on the south shore of the Alaska Peninsula between Cape Kunnik and Wide Bay. These maps are not of standard quadrangle size.

The field inspection was accomplished from the Motor Vessel WESTDAHL, S. B. Grenall commanding, whose "Report of Field Inspection of Air Photographs, Alaska Peninsula, Wide Bay to Cape Kunnik, 1944" is filed in the general files of the Division of Photogrammetry.

The radial plot for project CS-317 was made in the Baltimore Office using templates of nine-lens photographs on polyconic projection bases at 1:20,000 on the North American 1927 Datum. The shoreline was compiled by graphic methods on manuscript bases. All of the materials were then forwarded to the Washington Office where the contouring was compiled from rectified nine-lens photographs on the Reading Plotter, using a contour interval of 200 feet. The maps and materials were then forwarded to the Baltimore Office where the final compilation and inking of the manuscript were completed, after which they were again returned to the Washington Office where they were critically examined in the Stereoscopic Mapping Section, reconciling all discrepancies between hydrographic and topographic features.

A cloth-backed, advance, photographic print of the manuscript is registered with the descriptive report. When the map is printed a cloth-backed lithographic print will replace the advance photographic print. Depth curves and critical soundings are not shown on this map because the hydrography is very old and sketchy.

S. V. Griffith
S. V. Griffith
Chief, Review Section
Div. of Photogrammetry

FIELD REPORT

MAP MANUSCRIPT, SURVEY NO: T-8619

ALASKA PENINSULA

AMBER BAY TO NAKALILOK BAY

PROJECT NO.CS-317

1. DESCRIPTION OF THE AREA:

Map Manuscript for Survey No. T-8619 includes the area on the southern shore of the Alaska Peninsula from Nakalilek Bay south to Amber Bay. Ugaiushak Island and several smaller islands are also included.

In general, the high water line is very sharp and distinct, as a greater part of the shoreline is steep and rocky with no horizontal high to low water interval. The small sand beaches at the heads of the narrow bights between the cliffs are generally very steep with the high water line close to the cliff.

The heads of Yantarni and Nakalilek Bays have large, flat, delta areas at the mouths of the rivers, which are changeable with very indefinite high and low water detail. This sand is very light and shifts continually with the storms. Also the head of Yantarni Bay has built out to seaward. This is typical of all of the flat beaches in the area. Probably this has been caused partly by deposits from Aniakchak Volcano which is in the vicinity. Some of the beaches have rows and mounds of pumice which has been driven ashore as drift.

There are no trees in the area and the only vegetation consists of moss, grass, and low alder brush.

2. COMPLETENESS OF FIELD INSPECTION:

Due to the limited time under favorable weather conditions which was available for field inspection it was impossible to completely field inspect the area. Whenever the opportunity offered, an effort was made to denote the detail along the bold and rocky shore. Few landings were made on this type of beach and most notes were made from offshore. However, careful stereoscopic examination of the photographs should reveal the shoreline detail.

Notes of foreshore and offshore features have been made as complete as time permitted. Detailed notes on the character, formation, and heights of rocks and reefs which have been omitted at this time, will have to be made at the time of the next hydrographic survey.

2. COMPLETENESS OF FIELD INSPECTION (Continued)

Identification of the horizontal control is complete.

Ugaiushak Island and Hydra Island fall outside the area covered by photographs. These islands have been covered by a planetable survey on Topographic Sheet A-1944, scale 1:20,000, surveyed and inked by Lieutenant Commander Curtis Le Fever, thus giving complete topographic coverage to the area. This topographic sheet is accompanied by a descriptive report.

3. INTERPRETATION OF THE PHOTOGRAPHS:

Sufficient notes have been made on the field photographs to enable the compilation office to augment the field interpretation by analogy where necessary.

4. HORIZONTAL CONTROL:

Eleven new triangulation stations have been established by the field unit. However, four of these stations could not be identified on the photographs. Of these four, three fall in the area not covered by photographs. Form M-982-1, complete with sketch, is being submitted for each of the seven stations identified on the photographs.

5. VERTICAL CONTROL:

No vertical control was established or recovered within the area of this survey.

6. DRAINAGE:

Drainage has not been identified on the field photographs.

7. MEAN HIGH WATER LINE:

The mean high water line was inspected only whenever practicable due to the limited time and weather conditions. Few landings were made on the rocky shoreline and most notes were made from offshore. Landings were made at the heads of Yantarni and Nakalilok Bays, as well as at several similar areas, and it was found impossible to make definite notes on the photographs as the area had actually changed since the photographs were made.

8. MEAN LOW WATER LINE:

The mean low water line has not been inspected.

10. DETAILS OFFSHORE FROM THE MEAN HIGH WATER LINE:

Notes on details offshore from the mean high water line have been made as complete as time permitted, but only a few of the many rocks in the area have been noted. Detailed notes which have been omitted will have to be made at the time of the hydrographic survey.

11. LANDMARKS AND AIDS TO NAVIGATION:

No previously charted landmarks or non-floating aids to navigation fall within the area of this survey and none are recommended.

12. HYDROGRAPHIC CONTROL:

14 Recoverable photo (topographic) stations

A brief description of each station has been furnished on the field photographs on which it falls.

13 Recoverable planetable (topographic) stations

These stations, which fell outside the limits of photography for this project, have been described on the planetable survey, Topographic Sheet No. A-1944.

18. GEOGRAPHIC NAMES: *234*

No investigation of geographic names was made.

COMPILATION REPORT

MAP MANUSCRIPT, SURVEY NO. T-8619

ALASKA PENINSULA

AMBER BAY TO NAKALILOK BAY

PROJECT NO. CS-317

26. CONTROL:

The horizontal control in the area of Map Manuscript for Survey No. T-8619 consists of eleven stations. They are as follows:

<u>Name of Station</u>	<u>Type of Station</u>
✓ BEAK, 1944 (a)	Triangulation (Intersection)
✓ CAPE, 1944 (b)	Triangulation (Intersection)
✓ CENTRAL, 1944	Triangulation
✓ COHO, 1944	Triangulation
* ✓ EXTRA, 1944 (c)	Triangulation
✓ HAWK, 1944 (d)	Triangulation
✓ HYDRA, 1944 (d) (e)	Triangulation
✓ KUNMIK, 1944 (d)	Triangulation
✓ LONG, 1944	Triangulation
✓ OGAI, 1944 (d)	Triangulation
✓ YANT, 1944 (c)	Triangulation

(a) Falls outside the limits of the survey but detail has been extended to include the station.

(b) According to the description of the station CAPE, 1944, the station is 55 meters back from the high water line. As plotted on the map manuscript it is only 35 meters back from the high water line.

(c) Not held to in the radial plot. Radially plotted position of the point identified on field photographs has been shown on the map manuscript.

(d) Station not identified.

(e) Falls outside the limits of the survey but plotted in an insert shown on the map manuscript.

Five of the above mentioned eleven horizontal control stations were used for controlling the radial plot.

*Two different points were identified by the field unit

26. CONTROL:(Continued)

for this station. The position of the point which proved to be closer to the geographic position of the station was radially plotted on the map manuscript.

27. RADIAL PLOT:

The radial plot for the area of this survey is part of a combined plot made with celluloid templates. The Radial Plot Report will be submitted at a later date.

Radial Plot Report Filed in General Files in General Files of the Div. of Photogrammetry.

28. DETAILING:

The compilation of this map manuscript is in accordance with the written instructions for Project No. CS-317 and is a shoreline survey. Instructions are filed in Office files of the Division of

Photogrammetry, and are supplemental to instructions for CS 279.

The horizontal control stations and horizontal pass points available for the compilation of the survey were adequate. However, the field data and photographic coverage were not.

Due to the lack of field data (see siding headings #2 and #7 of the Field Report) the mean high water line was delineated after careful stereoscopic examination of the office photographs. Because of insufficient photographic coverage and field data the mean high water line in several areas could not be accurately identified. In these instances, the mean high water line has been shown on the map manuscript with a dashed line and accompanied with an appropriate note. Some of the shoreline changes with every storm and these areas also could not be accurately identified. In one instance, the mouth of a river had moved 500 meters to the southeast between the time of the photographs and the time of the field inspection.

There are no photographs covering the areas of Ugaiushak Island or Hydra Island. A planetable survey, Topographic Survey No. A-1944, scale 1:20,000 Valdez Datum, was furnished this compilation office. Triangulation stations HAWK 1944, UGAI 1944, and HYDRA 1944, were shown on the topographic sheet. The geographic positions, based on Valdez Datum, of these three control stations were also noted on the topographic sheet. The difference between Valdez Datum and North American 1927 Datum was computed in this office. Polyconic projection lines, based on North American 1927 Datum were then superimposed on the topographic sheet. The positions of control stations HAWK 1944, UGAI 1944, and the polyconic projection lines as drawn on the topographic sheet coincided with their respective positions as shown on the map manuscript.

The detail of the area of Ugaiushak Island was then traced directly from the topographic sheet to the map manuscript. The detail

28. DETAILING:(Continued)

of the area of Hydra Island was traced to an insert on the map manuscript by the same procedure.

A complete discussion relative to the compilation of the planetable survey can be found in the copy of the "Descriptive Report to Accompany Topographic Sheet A 1944" attached to this report.

30. MEAN HIGH WATER LINE:

The mean high water line has been delineated after careful stereoscopic examination of the office photographs and has been shown with a solid heavy weight black acid ink line except in cases where it could not be accurately identified. (See #28 DETAILING). In the latter case it has been shown with a dashed heavy weight black acid ink line.

31. MEAN LOW WATER LINE:

The position of the mean low water line was not identified by the field unit and none has been shown on the map manuscript.

31A. SHOAL LINES:

Shoal lines have been shown on the map manuscript according to office interpretation of the photographs and are shown with long, dashed, light weight, black acid ink lines accompanied with the note "shoal".

31B. REEF LINES:

Reef lines have been delineated in accordance with the field data and shown on the map manuscript with short, dashed, lightweight, black acid ink lines accompanied with the note "reef".

In some instances, the field data indicated "reefs bare at high water". This is contrary to the normal interpretation of "reef" by the compilation office, but it is believed that this designation was intended to convey the fact that portions of these reefs bare at high water. The entire area, however, has been shown as "reef" in accordance with the field data.

31C. FORESHORE AREAS:

The foreshore area includes kelp, rock ledge, detached rocks, sand, and gravel, and boulder beaches. Such features have been delineated in accordance with the field data and, when field data were

31C. FORESHORE AREAS:

lacking, from office interpretation of the photographs. Within the area field inspected, the extents to which detached rocks bare at mean high water or uncover at mean lower low water have been shown on the map manuscript with notes which are in accordance with the field data. Detailed notes for the foreshore area which have been omitted at this time will be made at the time of the next hydrographic survey.

32. DETAILS OFFSHORE FROM THE MEAN HIGH WATER LINE:

Details offshore from the mean high water line have been delineated in accordance with the field data. However, only a few of the many rocks in the area have been inspected by the field unit due to the limited time. Therefore, detailed notes which have been omitted will have to be made at the time of the next hydrographic survey.

34. LANDMARKS AND AIDS TO NAVIGATION:

No previously charted landmarks or non-floating aids to navigation fall within the area of this survey. None were recommended by the field unit.

35. HYDROGRAPHIC CONTROL:

- 4 Recoverable photo (topographic) stations
- 13 Recoverable planetable (topographic) stations
- 8 Temporary photo (topographic) stations

Hik	1444
Chu	"
Fal	"
Kun	"

Brief descriptions of the stations have been lettered directly on the map manuscript at the station.

Form No. 524 is being submitted for each of the 4 recoverable photo (topographic) stations. Filed in Div. of Photogrammetry General Files

38. GEOGRAPHIC NAMES:

As instructed, no geographic names investigation was made by the field unit. The geographic names appearing on the map manuscript have been taken from Nautical Chart No. 8502 and from the U.S.G.S. Topographic Map of Kanatak District, Alaska Peninsula.

39. JUNCTIONS:

The junction with Map Manuscript, Survey No. T-8618, to the north will be made when that survey is completed. Done

The junction with Map Manuscript, Survey No. T-8620, to the west will be made when that survey is completed. Done

To the east and to the south are all-water areas.

40. HORIZONTAL ACCURACY:

The position of all detail of importance is believed to be within 0.5 mm with the exception of those portions of the mean high water line shown with a dashed line.

41. RECOMMENDATIONS FOR FUTURE SURVEYS:

Map Manuscript, Survey No. T-8619, is complete with respect to all known details necessary for charting except those not definitely revealed by photography which should be investigated during the next hydrographic survey. These features have been noted in "Notes for Hydrographic Parties" attached to this report.

43. COMPARISON WITH EXISTING TOPOGRAPHIC MAPS:

U.S. Geological Survey topographic map of Kanatak District, Alaska Peninsula, scale of 1:250,000, published in 1935.

No comparison between the topographic map and the map manuscript was practicable for the following reasons:

- (1) Great difference in scale
- (2) The greater portion of the area common to the topographic map and the map manuscript is unsurveyed on the topographic map.
- (3) Parts of the shoreline in this area are subject to change with every storm.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

No U.S. Geological Survey topographic quadrangles covering the area of this survey have been published, and no other topographic quadrangles are available to this compilation office.

45. COMPARISON WITH NAUTICAL CHARTS:

United States Coast and Geodetic Survey Chart No. 8502, scale 1:1,000,000 published at Washington, D. C., August 1944, corrected to July 20, 1946.

Due to the great difference in scale between the map manuscript and the chart, minute comparison was not possible. However, features common to the map manuscript and to the chart are, in general, in good agreement. Minor differences in offshore and foreshore features for which data were lacking, are mentioned in "Notes for Hydrographic Parties" attached to this report.

Respectfully submitted:
21 October 1946

Ruth E. Rudolph
Ruth E. Rudolph
Photogrammetric Aid

Map Manuscript and
Descriptive Report
Reviewed by:

Raymond Glaser
Raymond Glaser
Engineering Draftsman

Compilation of Map Manuscript
Supervised by:

Harry R. Rudolph
Harry R. Rudolph
Photogrammetric Engineer

Approved and Forwarded:
23 October 1946

William F. Deane
William F. Deane
Chief of Party, C&G Survey
Officer in Charge
Baltimore Photogrammetric Office

FOR

HYDROGRAPHIC PARTIES

ALASKA PENINSULA

MAP MANUSCRIPT, SURVEY NO. T-8619

PROJECT NO. CS-317

The $2\frac{1}{2}$ mm black acid ink circles, accompanied with a name, date (1944) and a brief description, are the positions of the recoverable photo (topographic) stations.

The $2\frac{1}{2}$ mm black acid ink circles, shown in the area of Ugaiushak Island, accompanied with a brief description, are the positions of recoverable planetable (topographic) stations transferred to the map manuscript from Topographic sheet No. A-1944.

All other such circles accompanied only with a brief description, are the positions of the temporary photo (topographic) stations, selected and described in the compilation office.

Those parts of the mean high water line which could not be accurately delineated, because of lack of photographic coverage, have been shown on the map manuscript with the conventional symbol for unsurveyed shoreline.

The outline of shoal and reef areas shown are approximate and for your advance information only. They are shown with long dashed and short dashed black acid ink lines, respectively, accompanied by the note, "shoal" or "reef".

The following charted features were not definitely revealed by photography and should be investigated during the next hydrographic survey:

Four sunken rocks and one high water rock on the Southeastern shore of Alaska Peninsula between Yantarni Bay.

One sunken rock and one high water rock at the southern tip of a point of land just E of the entrance to Yantarni Bay.

One sunken rock at the southern tip of Cape Kummik.

The following charted features are in disagreement with the Map manuscript:

Two high water rocks on the southwestern shore of Cape Kummik are shown as ledge or reef areas on the map manuscript.

Several high water rocks on the southern shore of Cape Kummik are shown as ledge or reef areas on the map manuscript.

One sunken rock to the east of Cape Kummik is shown as rock

ledge on the map manuscript.

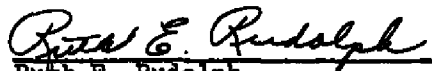
Note; For location see section of Nautical Chart No. 8502 attached to this report. Those features not definitely revealed by photography are shown with a red ink line around the area in which they fall and those in disagreement with a green ink line.

In addition, the following features should also be investigated during the next hydrographic survey:


Portions of the mean high-water line circled with a green ink line on the section of Chart No. 8502, could not be accurately delineated on the map manuscript because of lack of photograph coverage.

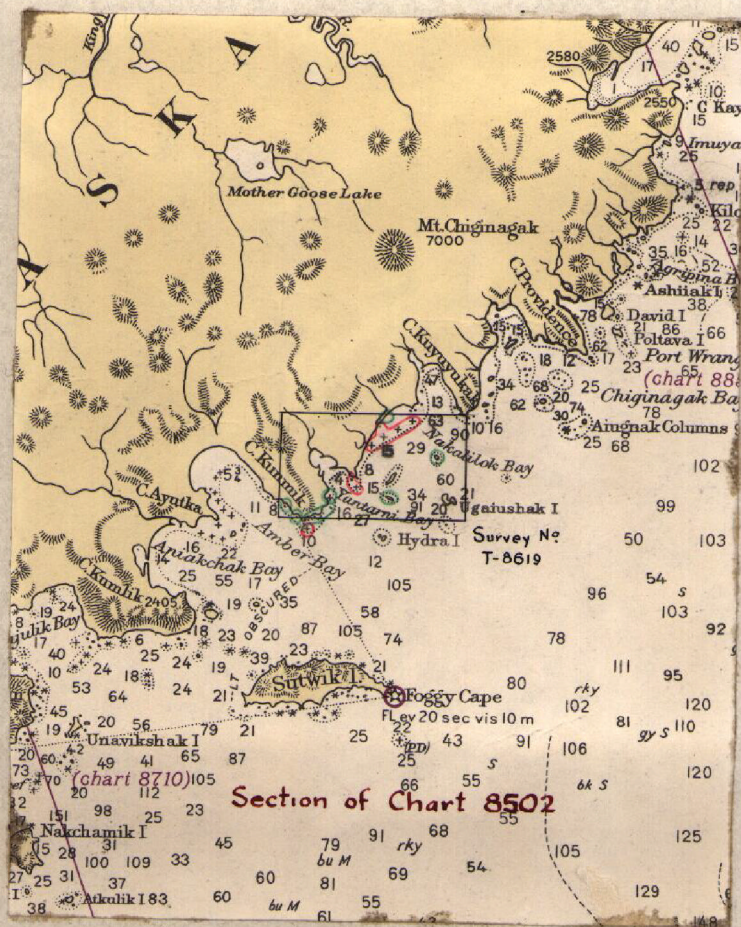
That portion of the field inspection of the foreshore and offshore areas which have been omitted by the field unit at this time because of a lack of time and unfavorable weather conditions.

Respectfully submitted:
21 October 1946


Ruth E. Rudolph
Photogrammetric Aid

Approved and Forwarded:
23 October 1946


William F. Deane,
Chief of Party, C. & G. Survey,
Officer-in-Charge,
Baltimore Photogrammetric Office.



GEOGRAPHIC NAMES

Survey No. T-8619

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
Alaska Peninsula			"	"				USGB		2
Nekalilok Bay			"	"						3
										4
Central Island										5
Ugaliushak Island								USGB		6
Yantarni Bay										7
Home Creek										8
North Fork										9
Misery Creek										10
Hydra Island										11
Cape Kummik										12
Amber Bay										13
Yantarni Creek										14
										15
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										27

Names underlined in red are
approved. 1/4/49 L. Beck.

Division of Photogrammetry
Review Report of
Topographic Map Manuscript T-8619

Subject numbers not used in this report have been adequately covered in other parts of the Descriptive Report.

26 Control

Horizontal control data form M-2388-12 listing all triangulation stations, within the limits of the map, on the N.A. 1927 adjusted datum is attached to the descriptive report.

Triangulation stations Extra 1944, and Yant 1944, were not held in the radial plot. An examination of the photographs, indicates the identification to be impracticable by direct pricking and it is presumed that the field identification was faulty.

Both the geodetic positions and radially plotted positions for Extra 1944 and Yant 1944 are being retained on the map manuscript, as an aid for future completion surveys.

28 Detailing

The final review corrections and changes were made on the map manuscript to insure completeness and conformance with specifications.

The delineation of shoreline was carefully examined and compared with both the office and field inspection photographs. Even though the field inspection of the M.H.W.L. was very meager, the character of the steep rocky bluff shoreline and steep sandy beaches rigidly fix the line within very narrow limits; the same cannot be said of shoreline hidden by shadows, the limits of shallow areas, ledgelines and all other features offshore from the high-water line. Such features are subject to change by the hydrographic party. The delineation of offshore features was based on the photo-interpretation of the office compiler and has been shown only as an aid to the hydrographer.

Attention is called to the delineation of Hydra Island, Ugaiushak Island and the reef south of Ugaiushak Island. The islands and reef were outside the limits of the photographic coverage and were surveyed by planetable methods. The contours were not surveyed. The planetable survey was incorporated into map manuscript T-8719 by the compiler.

The original planetable survey sheet has been destroyed. Photostat copies of the planetable sheet and the descriptive report, submitted by Lt. Comdr. S. B. Grenell, are filed in the Division of Charts as chart letter 112 (1945). A photostat copy of the planetable sheet and the original descriptive report are also attached to this report. All details transferred from the planetable survey have been accepted as correct by the reviewer except for terminology. (Example - uncovers 8' M.L.W.L. changed to awash M.H.W. and uncovers 3' M.L.W.L. changed to (3).

~~Attached to the back of the descriptive report is a report of the planetable survey, submitted by Lt. Comdr. S.B. Grenell.~~

38 Geographic Names

All Geographic Names shown on the map manuscript have been approved by the Geographic Names Section of the Division of Charts. Attached to the Descriptive Report is a list of approved geographic names.

47 Adequacy of Compilation

An examination of map manuscript T-8619 indicates it to be complete in all details as a base map for nautical charts and hydrographic surveys. From the M.H.W.L. inland all delineated details are adequate for incorporating into standard quadrangle maps, of publication scale recommended not to be larger than 1:24,000 feet, except for the first 100 ft. contour.

48 Accuracy Tests

Horizontal

No horizontal accuracy test was made. The combination of adequate nine-lens photographic coverage, nine-lens radial plot methods and adequate horizontal control, insures a horizontal accuracy equal to or better than National Map Accuracy Standards.

Vertical

Vertical accuracy tests have not been made on this map nor have similar areas mapped by similar methods been previously tested.

A consultation with the instrument operators indicates that contour errors have been minimized by the lack of woodland cover, and any discrepancies which occur, are caused by datum errors in the nine-lens chamber junctions. Such errors have been minimized by the presence of tide water as a basis for datum corrections at chamber junctions.

51. Application to Nautical Charts
T-8619 has been applied to chart 8802, prior to review.

Reviewed by:

~~Under the direction of:~~


Harland R. Cravat 1/5/49

~~Chief, Review Section~~

Approved by:

L. V. Griffith
Chief, Review Section K. H. M.

A. C. Edmonston
Chief, Nautical Chart Branch
Division of Charts

K. T. Adams
Chief, Division of Photogrammetry

W. M. Scaife
Chief, Div. of Coastal Surveys

DESCRIPTIVE REPORT
TO
ACCOMPANY
TOPOGRAPHIC SHEET A-1944
SOUTH SIDE ALASKAN PENINSULA
PROJECT CS - 279
317

MOTOR VESSEL WESTDAHL S. B. GRENELL, COMDG.

AUTHORITY: Instructions dated February 29, 1944.

SCALE OF SURVEYS: The scale of the survey of Aiugnak Columns is 1-22800 due to the wrong telemeter being taken by mistake when the survey was made. Ugaiushak and Hydra Islands are scale 1-20000.

GENERAL DESCRIPTION: The few small islands and reefs lying along the south side of the Peninsula between Wide Bay and Sutwik Island which were not covered by the recent aerial survey in that vicinity.

Aiugnak Columns are a scattered group of small steep sided islets and rocks lying off Cape Providence.

Ugaiushak and Hydra Islands lie about 7 miles off shore between Capes Kuyuyukak and Kunmik.

CONTROL: Triangulation control was established by a Geodetic party in this area at the time the topographic survey was executed.

METHOD OF SURVEY: Standard topographic survey methods were used through out this survey. The field work was completed at the same time as the triangulation and from the same vessel that was furnishing transportation for the triangulation party. At that time the geographic positions of the triangulation stations had not been determined.

The different surveys were started at the triangulation stations which were plotted on the blank sheet and all other points and all details of each separate area were connected to the starting point by directions and rod readings, both being used where possible.

On Ugaiushak Island the survey was started at HAWK 1944, graphic triangulation being extended over the island, connecting points previously marked by flags. Station UGAI 1944 was contained in this graphic scheme and was located by outs from HAWK and several other points suitably situated. The located flags were then used as set up points and all details of the survey established by rod readings or by intersections. A suitable comparison in distance between the two triangulation stations and in their geographic positions was later made when the field geodetic computations were completed.

The meridians and parallels were placed on the projections when the geographic positions were available and after the field work was completed.

All elevations were determined by vertical angles.

No points on the island were marked with any degree of permanency except the two triangulation stations however all the points marked with red circles are natural features which are recoverable and can be used for control on a hydrographic survey. They are described on the topographic sheet and no other descriptions are considered necessary.

COMPARISON WITH PREVIOUS SURVEYS: No detailed comparison with Chart No. 8502 has been made due to the large difference in scale, however some of the important details which are not shown on that chart are dangers to navigation and are listed below:

The large reef about 0.6 miles in length which is one mile south of Ugaiushak Island has several high points the highest being 60 feet in elevation and grass covered. The entire reef bares at the extreme minus tides.

The rock which is one-third mile southeast of the southeast end of Ugaiushak Island is a danger to any vessel rounding that point of the island. It bares 5 feet at mean lower low water and apparently is surrounded by fairly deep water as no kelp was seen growing in its vicinity.

LAND MARKS FOR CHARTS AND AIDS TO NAVIGATION:

There are no land marks or aids to navigation in the areas covered by this survey.

ANCHORAGE AND CAMP SITE:

The small bay on the north side of Ugaiushak Island could be used as an emergency anchorage for small vessels seeking shelter from southerly weather. Anchor in from 6 to 8 fathoms of water just outside the kelp beds in the center of the bay.

There is a possible camp site ashore for a hydrographic launch party as the launch could be anchored outside the kelp during normal weather and in the heavy kelp beds where the depth varies from 3 to 5 fathoms if the weather got troublesome. It could be anchored in the south bight during northerly weather. The main advantage to this camp site is the unoccupied house in fairly good repair with a drinking water supply close by.

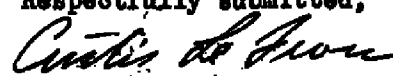
STATISTICS:

Shoreline in statute miles - - - - - 11.0

Approved and forwarded:


S. B. Grenell, Lt. Comdr., USC&GS
Comdg., WESTDAHL.

Respectfully submitted,


Curtis Le Fever,
Lieut. Comdr., USC&GS

NAUTICAL CHARTS BRANCH

SURVEY NO. 78619

Record of Application to Charts

[illegible]

M-216B-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.

