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| Form 504 Rev. Dec. 1933 DEPARTMENT OF COMMERCE U.S. COAST AND GEODETIC SURVEY R. S. PATTON, Director | |
| DESCRIPTIVE REPORT | |
| Topographic Hydrographic | Sheet No. K-39 T-6717 |
| | |
| State | ALASKA |
| LOCALITY | |
| UNALASKA ISLAND | |
| KASHEGA BAY | |
| | |
| 1934 | |
| CHIEF OF PARTY | |
| Ray L. Schoppe | H. & G. E. |

U. S. GOVERNMENT PRINTING OFFICE: 1934

DECLASSIFICATION BY NOAA
PURSUANT TO DOC SYSTEMATIC REVIEW
GUIDELINES AS DESCRIBED IN SECTION
3.3 (a), EXECUTIVE ORDER 12356

Applied to ch. 8802 S.M.A. Nov. 1940
" " " 9022 J.W. Dec 1941

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.

Project HT-218

Field No. K-39

REGISTER NO. T-6717

T6717

State ALASKA * ALEUTIAN ISLANDS

General locality UNALASKA ISLAND

Locality Vicinity of KASHEGA BAY

Scale 1:10,000 Date of survey AUGUST, 1939

Vessel U.S.C. & G.S. Str. SURVEYOR

Chief of party Ray L. Schoppe

Surveyed by J.C. Partington

Inked by J.C. Partington

Heights in feet above M.H.W. to ground to tops of trees

~~Contour, Approximate contour,~~ Form line interval 100 feet

DIRECTOR'S RADIOGRAM

Instructions dated July 10, 1939

Remarks: _____

DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET No. K-39

KASHEGA BAY, UNALASKA ISLAND, ALASKA

Register No. T-6717

U.S.C.&G.S.S. SURVEYOR

Ray L. SCHOPPE, Com'd'g.

INSTRUCTIONS:

The work was accomplished in accordance with the Director's telegram of July 10, 1939. The purpose of the survey was to determine the volume of the lagoon areas as a measure of the fill required to convert them into landing fields. ✓

EXTENT:

This sheet together with Sheet ^{T-6718} J-39 covers the valley of Unalaska Island from Kashega Bay on the Bering Sea to Kuliliak Bay on the Pacific Ocean. This valley is approximately 4 miles long and one mile wide extending in an east and west direction. The floor of the valley is covered with fresh water lagoons which are fed by small streams. The sides of the valley are bounded by high hills which are entirely covered with grass. ✓

GENERAL DESCRIPTION:

The area covered by this sheet lies in a valley bounded on the north and south by high hills: The hills to the northward are rolling while the hills to the south are steep with a jagged skyline running in an east and west direction. ✓

The village of Kashega at the head of Kashega Bay, is a village having a population of approximately 30 people. A mail boat calls here once a month. ✓

The streams which empty from the lagoons into Kashega Bay are shallow at their mouths. Many fish ascend these streams to spawn. The only game or wild life are foxes. ✓

CONTROL:

The control for this sheet is second and third order triangulation executed in 1935, 1936, and 1937. The six triangulation stations shown afforded ample control for rigidly controlling the topography. Triangulation station LAKE, 1935 was not visited but its position was verified by plane table cuts taken from recovered triangulation stations. The signal at LAKE, 1935 was standing in place at the time of this survey. All of the other triangulation stations were recovered and signals were erected over each. ✓

SURVEY METHODS:

This sheet was done entirely by plane table. ✓

The elevations of triangulation stations were determined by vertical angles from plane table set-ups near the high water line. Next the peaks on each side of the valley were located by cuts and vertical angles from set-ups at triangulation stations or strong 3 point fixes along the high water line. Three or more cuts and vertical angles were taken to each peak. The hypsograph was used for computing differences of elevation. ✓

In determining the elevations of peaks it was found that the mean elevation seldom differed by more than 5 feet from the elevation as found by individual cuts and angles. ✓

All of the other elevations shown were determined by stadia distances and vertical angles. ✓

All topographic signals were located by 3 or more cuts taken from triangulation stations or from strong 3 point plane table positions. The shorelines of the lagoons were located by stadia. ✓

In order to determine whether the tide affects the elevation of these lagoons a tide staff was established at the position shown at the west end of the eastern lagoon. The survey party was camped at the village of Kashega from August 1 to Sept. 1, 1939 during which time the tide staff was observed daily. No variation of more than 0.1 ft. of the lake level was found. This slight variation was due to the fluctuation of the lake level between periods of heavy rain and dry weather. At no time did the tide back up into the lagoons. ✓

However, local residents of Kashega village state that the tide backs up into the lagoons during heavy northwesterly weather. ✓

The elevation of the lake surface of each lagoon was determined by reading a level rod, and using the bubble of the alidade as a spirit level. These elevations, referred to Coast and Geodetic Survey tidal bench marks, are shown on the sheet. ✓

To obtain the elevations on slopes and in valleys the plane table was set up inland at commanding sites where strong three point fixes could be obtained. Elevation of the instrument was determined by vertical angles to two or more points of known elevation, such as triangulation stations or points along the high water line. Elevations of other visible points were obtained by rod readings and vertical angles. Form lines were sketched in the field as the survey progressed. ✓

MATERIAL:

Since the survey party was not equipped to take borings, no definite information could be obtained concerning the character of subsurface material. ✓

The entire area is thickly covered with grass except for a few rocky outcropping peaks. In sounding the lagoons a special snapper type of specimen cup was used and the bottom was found to be mostly composed of sand and gravel with occasional rock. The shoreline of the lagoons is mostly rocky with very few stretches of sand beach. It appears doubtful as to whether this material could be sluiced into the lagoons. ✓

COMPARISON WITH PREVIOUS SURVEYS:

The shoreline of Kashega Bay shown in pencil was traced from the hydrographic sheet accomplished in 1937. It is believed that this shoreline and some inland detail was taken from the air photo map^{T-5270} of this area. No copy of this map is at hand so that no comparison was made. *Comparison made in office. See review.* ✓

A general comparison was made between the south limit of this sheet and the north limit of sheet T-6640. The elevations and positions of identical peaks were found to agree closely. It is recommended that the detail of the area north of the ridge be taken from this sheet and that the detail south of the ridge be taken from T-6640. ✓

COMPARISON WITH SHEET J-39:

^{T-6717} Sheets K-39 and J-39 were surveyed at the same time and using the same adjoining control. The junction was compared and found to be exact. ✓

NAMES:

The following names are taken from Chart 8802:

Kashega Bay

Kashega

Unalaska Island

The name BUCK ISLAND was taken from the hydrographic sheet of this area and from the Coast Pilot. These four names are in local use. The lagoons shown on this sheet appear to have no local names. No new names were added.

RECOVERABLE OBJECTS:

All of the topographic signals located on this sheet were temporary banners for use in hydrography. None of the signals is recoverable. ✓

TRIANGULATION RECOVERY:

Recovery cards form No. 526 for triangulation stations in this area are attached. *Forwarded to Div. of Geodesy.*

MAGNETIC OBSERVATIONS:

A magnetic meridian was determined at triangulation station Kashega 1936 with declinatoire No. 232. This declinatoire was sent to the Washington office before comparison at a standard magnetic station, Its' index correction, however, can be obtained from a field comparison with declinometer No. H-16 at triangulation stations Ama 1938 and Samalga 1938. See descriptive report for Topographic Sheet T-6710. *Index corr. at beginning of season was +0° 41.5'. This is in good agreement with results at Ama and Samalga. Declination normal.*

STATISTICS:

Shoreline-----91.9 statute miles.
 Streams-----16.5 " " "
 Area-----10 square statute miles.

Respectfully submitted,

J. C. Partington
 J. C. Partington
 Jr. H. & G. E.
 Topographer

Examined and approved:

Ray L. Schorpe
 RAY L. SCHORPE
 H. & G. E.
 Com'd'g. Str. SURVEYOR

Remarks

Decisions

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GEOGRAPHIC NAMES

Survey No.

T6717

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 | |
| <u>Buck Island</u> | | | | | | | | | 1 |
| <u>Kashega Bay</u> | | | | | | | | | 2 |
| <u>Kashega</u> | | | | | | | | | 3 |
| <u>Unalaska Island</u> | | | | | | | | | 4 |
| <u>Buck Bight.</u> | | | | | | | | | 5 |
| | | | | | | | | | 6 |
| Names underlined in red approved by L. Heck on 5/21/40 | | | | | | | | | 7 |
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MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
PHOTOSTAT OF

~~No. 11~~

No. T T6717

CONFIDENTIAL

received April 18, 1940
registered April 30, 1940
verified
reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

| ROUTE | | Initial | Attention called to |
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| 20 | | | |
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RETURN TO

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| 82 | T. B. Reed |
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✓ JBSOR

DIVISION OF CHARTS

Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY NO. 6717 (1939) FIELD NO. K-39

Aleutian Islands; Unalaska Island; Vicinity of Kashega Bay
Surveyed in August 1939, Scale 1:10,000
Instructions dated July 10, 1939 (SURVEYOR)

Plane Table Survey

Aluminum Mounted

Chief of Party - R. L. Schoppe.
Surveyed and inked by - J. C. Partington.
Reviewed by - J. A. McCormick, August 28, 1940.
Inspected by - H. R. Edmonston.

1. Purpose and Extent of Survey.

The area covered by the present survey had already been covered on T-5270 (1936) and T-6640 (1937-38) but more detailed information was required for use of the U. S. Army Air Corps in connection with the proposed establishment of a landing field. The present survey accordingly was confined to rerunning of the shores of the lagoons and to detailed form lining. The Bering Sea shoreline was not resurveyed.

Considerable difficulty was experienced in the office adjustment of form lines on T-5270 and T-6640 to those of the present survey. Lagoon shorelines were in good agreement and the junction with T-6718 (1939), which was also a part of this special project, was excellent. Depths in the lagoons are shown on H-6508 (1939).


Examined and approved:



T. B. Reed,
Chief, Section of Field Records.



Chief, Section of Field Work.



Chief, Division of Charts.



Chief, Division of H. & T.