

6048

Diag. Cht..No. 8502-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC

Field No. C Office No. T-6048

LOCALITY

State SOUTH WEST ALASKA

General locality KODIAK ISLAND

Locality SPRUCE ISLAND

1943

CHIEF OF PARTY

H. B. Campbell

LIBRARY & ARCHIVES

DATE May 15, 1934

B-1870-1 (1)

6048



DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO. 6048

## 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 Letter "C"

REGISTER NO. 6048

State S. W. Alaska

General locality Kodiak Island

Locality Spruce Island and Two Triangles

Scale 1:20,000 Date of survey July--August, 1933

Vessel DISCOVERER

Chief of Party H. B. Campbell

Surveyed by Henry O. Fortin

Inked by Henry O. Fortin

Heights in feet above M.H.W. to ground ~~xxxxxxxxxxxxxxxx~~~~Contours approximately horizontal~~ Form line interval 100 feet  
April 21, 1932.

Instructions dated supplemented March 25, 1933

Remarks:



-:-:-:-:-

DESCRIPTIVE REPORT  
TO ACCOMPANY  
TOPOGRAPHIC SHEET "C".

SPRUCE ISLAND S. W. ALASKA

U.S.C. & G.S.S. DISCOVERER

H. B. Campbell, *Commanding*

Season of 1933

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DESCRIPTIVE REPORT  
TO ACCOMPANY  
TOPOGRAPHIC SHEET "C"  
SPRUCE ISLAND S. W. ALASKA

U.S.C. & G.S.S. DISCOVERER

H. B. Campbell, Commanding

Season of 1933

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AUTHORITY

This survey was made in accordance with the Director's instructions dated April 21, 1932, supplemented by instructions dated March 25, 1933.

PURPOSE

The purpose of this topographic survey was a revision of the old work on sheet number T-2854, 1907, and to furnish control for hydrography done within the limits of the sheet. However, the old work was found to be of such a nature that it was found advisable to make a complete new survey, as per the discrepancies which will be taken up in another paragraph.

LIMITS

This sheet extends from hydrographic signal ON, just south of triangulation station PASS 1907, where a proper connection was made with topographic sheet No. "B"; eastward and around the east and north sides of Spruce Island to hydrographic signal KEG, which again connects with topographic sheet No. "B". The Triplets, along latitude  $57^{\circ} 59'$  north, are also located on this sheet.

A connection was also made at hydrographic signal MOT with



Sheet "B" extending eastward with a portion of the shoreline of Kodiak Island to hydrographic signal HAD, where a proper connection was made with topographic sheet No. "D".

#### CONTROL

The topography was controlled by second and third order triangulation of 1907, 1932 and 1933 seasons. Sufficient triangulation stations were established to permit a quick, accurate location on the plane table.

The Valdez datum was used in determining location of stations.

#### SURVEY METHODS

The usual plane table survey methods were used. In general the topographic signals were located by three or more cuts from triangulation stations and verified by stadia when the shoreline was rodded in.

A combination traverse, resection, skip setup, and three-point fix method was used in locating all shore line, low water line, and other topographic details.

All closures were within the limits as allowed by the required standard of accuracy, and all rocks and reefs were located by stadia except in cases where the dangers were not surrounded by a dotted circle, the locations were made by intersection of three or more cuts.

#### FORM LINES

Seventy elevations were determined on this sheet; fifty-two on Spruce Island, and off-lying islands; and eighteen on Kodiak Island. Proper connections were made with sheet No. "D" south of triangulation station NUT and with sheet No. "C" along longitude  $152^{\circ} 32' W.$



Three or more cuts were used to determine elevations; they being computed to the top of the ground.

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#### GENERAL DESCRIPTION

The shoreline and slopes back of the shoreline on Spruce Island, which is on the south side of Marmot Bay, and that part of Kodiak Id. as shown, are quite heavily wooded with spruce trees. The trees are quite scattered along the five hundred foot contour line, and from there on to the highest points of the hills and mountains, grass is quite pronounced, finally terminating into barrenness around the fourteen hundred foot contour line.

In general, the shoreline of the north and east sides of Spruce Island are quite precipitous and rocky, broken up by numerous reefs, small islands, high water rocks, and small bays and bights. The south shoreline of Spruce Island and that portion of Kodiak Island as shown, although quite rocky, is not quite so rugged and broken up as the above mentioned.

The east end of Spruce Island is quite flat and marshy, in fact, Spruce Island in general has a low wooded strip all around it.

An old Russian Church at approximate latitude  $55^{\circ} 54.2'$  north and longitude  $152^{\circ} 21.8'$  west was spotted from a geological survey map, although visited by the topography party of this season.

The Triplets, lying 2 miles westward of North Cape off Spruce Island, are three grass-covered precipitous islands; the most northerly being the largest and 275 feet high. The group forms a chain 1 mile long, there being bare rocks between the two most northerly ones. These islands form a rookery for hundreds of surf birds. Until the hydrography is completed, North Cape, East Cape, South Point, Nelson Island, with neighboring island, Course Point, Prokoda Islet, Otmeloi



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Beacon, and the Village of Uzinki are adequately described in the Coast Pilot, except that the cannery wharf on the east side of the bay at Uzinki is now going to ruin, and no vessels are allowed to dock there, and that vessels of the Alaska Steamship Company make regular calls at Uzinki.

All rocks, reefs and ledges are properly inked and indicated on the sheet.

#### ANCHORAGES

Until the hydrography is completed around Spruce Island, the anchorages as described in the Coast Pilot remain the same, except with the following additions: The bay that lies  $3/4$  of a mile directly south of North Cape affords a fair anchorage for medium sized craft from a westerly wind. If small craft are using the head of the bay, care should be taken in passing to the north of the rock that bares 1 ft. at M.L.L.W. near the head of the bay.

Medium sized craft can find anchorage from a westerly wind in the next bay that lies 2 miles south of North Cape. The first cove just west of this bay can afford excellent anchorage for very small craft, but can only be entered at high tide on account of the ledge at its entrance.

Temporary anchorage from westerly winds and for medium sized craft could be had in the small bay  $2/3$  of a mile southwest of the islands where triangulation station SUB 1933 is established. *Lcon Bay*

An excellent anchorage from northeasterly and westerly winds can be had for small craft in 3 to 4 fathoms of water, sandy bottom, in the little cove  $2/3$  of a mile northwest of Nelson Island. The western shore should be favored while entering the cove on account of the rock that bares one foot at low water, 80 meters,  $319^{\circ}$  true from signal OUR. *Sunny cove*

The cove between Otmeloi and Entrance Points furnished good anchorage for medium sized craft from all winds except northwesterly, in 13 fathoms water, soft bottom.

*Above anchorages used by survey launches during work, but should only be used by small boats with care until thoroughly sounded.*

*Coast Pilot*

*Coast Pilot*



# DISCREPANCIES AND COMPARISON WITH PREVIOUS SURVEYS

The discrepancies in elevations are noted as follows. The highest point on the most northerly of the Triplets was found to be 275 feet, instead of 190 feet; that of Mt. Herman 1595 feet instead of 1580; the hill 1/2 mile north of Wooded Point, 845 feet instead of 800 feet; and the mountain one mile west of triangulation station NUT 1933, 1428 feet instead of 1400, and 500 meters out of position.

The discrepancies in shoreline as compared with bromide T 2854 are noted as follows: The two most southerly islands of the Triplets were changed considerably in shape and reduced in size. The small bay at signal KIN was found to be 150 meters less in depth. The shore line of the prominent bay just south of North Cape was found to be out as far as 200 meters in places. There is also an appreciable difference in the location of the islands in this bay.

Between signals BARES and GALE the old shoreline apparently was sketched in from the low water line.

At triangulation station SUB 1933 the two islands are formed at extreme high tide or during stormy weather.

A noted difference was found in the shoreline about one mile northeast of South Point, where numerous small islets and coves were different from the old work.

The small high water islet about 1/3 of a mile north of the north end of Nelson Island and 100 meters south of signal FAR was not observed by either the topographic or hydrographic parties. In all probability it was intended for the 6 foot high water rocks 190 meters south of it. It therefore should be expunged from the chart. *from T-2854(1907)*  
*FOR XUM.*  
*a rock awash in this vicinity was located by the field party on H-2922(1907). The roughly rock from T-2854(1907) has been carried forward as a rock awash and should be so charted. See Rev. Plan. 42. XUM. Dec. 9, 1935*

The remainder of the shoreline conforms quite closely with the old except for a few minor changes in little bights and bays and at Course Point, where signal CAN is 400 meters southwest of triangulation station COV 1907-1933.



This point has not the shape as shown on bromide T-2854.

The discrepancies of rocks are noted as follows:

The two rocks 330 and 410 meters northeast of triangulation station RAG 1933 were not observed. Rock 120 meters northwest of signal BARK was not observed; rock 200 meters south of signal EASE was not observed; two high water rocks and one low water rock 200 meters north of signal CUTE were not observed; high water rock just north of signal GALE and a group of rocks east of signal DARK were not noticed. Rock as shown 160 meters southeast of the two rocks 490 meters northeast of triangulation station SUB 1933 should be further investigated. Most likely this rock is merely out of position. Two rocks 160 meters south of signal RACK and one rock 200 meters south of signal TART were not observed.

The sunken rock 330 meters southwest of triangulation station BILL 1933 was not found either by the topographic or hydrographic party. However, a sunken rock with a least depth of 3-5/6 fathoms was located 480 meters south-west of BILL 1933. This area requires further development.

In all probability most of the above named rocks were not observed on account of high water while the topographic party was passing by. As the hydrography has not been completed in these areas, the positions of these rocks should be verified or disapproved when the final hydrography is being made.

According to the Post Office Department, the proper spelling of Uzinki is "Ouzinkie".

#### WELL ESTABLISHED LOCAL NAMES

Mt. Herman, elevation 1595 feet, was the name given to the highest point on Spruce Island. This name was found on one of the recent geological maps of Spruce Island, and is in memory of Father Herman, who founded the old Russian Church as shown on this sheet. There is some dispute over the proper spelling of Mt. Herman. Some claim it should be spelled "German", however, a history of

*no sig on H-5439 agree exactly with this depth: 4 fathoms, at 4' and 5' fathoms was obtained in this general vicinity. For further information consult Rev. of H 5439, Par. 9 h.*

*RAG wrong. - W.M.*



Alaska would settle the dispute.

Sunny Cove, being a name of local use, was the name given to the prominent little cove 1/2 mile northwest of Nelson Island.

#### NAMES ASSIGNED BY FIELD OFFICERS

Island Bay, on account of the islands found within its limits, was the name suggested for the bay south of North Cape. .

*Sever B.*

Knee Bay, on account of its shape likened to a knee, was suggested for the bay 3/4 of a mile southwest of triangulation station SOL 1933.

Baleek Cove, was the name suggested for the cove leading off from Knee Bay. This is a well established local name, due to the number of smoked salmon, (called baleek by the natives), which are smoked in this vicinity.

Icon Bay was the name suggested for the little bay 3/4 of a mile southwest of triangulation station SUB 1933, Icon being a well established local ecclesiastical name.

Neva Cove, in honor of Captain Lisianski's flagship Neva, was the name suggested for the prominent cove south of Uzinki Point.

Eider Island was the name suggested for the small island just east of Nelson Island; a number of Pacific eiders being observed here.

Trip Cove, taken from the name The Triplets, was the name given to the little cove just southeast of triangulation station RAG 1933.

In all probability, when the hydrography is completed in the above mentioned areas, better names in local use can be obtained.

*Hydro. sheet makes no mention of the above names.  
#5439 G.H.*

#### DISTORTION AND REMARKS

This sheet has been a splendid one to work on. Two or three times during the season this sheet was thoroughly drenched by rain or salt water, but no ill effects were noted. The glazed surface holds pencillings very well, the only fault being found was that the ink has a tendency to wear off quite



easily when the surface is being cleaned by artgum.

MAGNETIC OBSERVATION

A magnetic observation was made with the declinometer at triangulation station BILL 1933.

Respectfully submitted,

*Henry O. Fortin*  
Henry O. Fortin  
Jr. H. & G. Engr.

Approved and forwarded:

*H. B. Campbell*  
H. B. Campbell,  
H. & G. Engr.,  
Chief of Party.



LIST OF STATISTICS

Number of statute miles of high water line - - - - - 52.0

Number of statute miles of low water line- - - - - 18.0

Number of elevations determined- - - - - 70

Area, in square statute miles- - - - - 27.0

LIST OF PLANE TABLE POSITIONS

Name	Object & Description	Lat.	D.M. meters	Long.	D.P. meters	Height
Prokoda Island Light	White wooden house	57° 54'	936	152° 30'	672	8 ft.
Uzinki Church	West spire. White body, green roof and trimmings.	57° 55'	475	152° 30'	316	30 ft.



Survey No. 6048

GEOGRAPHIC NAMES		Survey No. 6048											
Name on Survey		<div>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</div>											
		A	B	C	D	E	F	G	H	K			
NEVA COVE ✓	✓	✓	✓	✓		✓	✓		✓	✓	1		
SUNNY COVE ✓	✓	✓	✓		✓	✓	✓		✓		2		
EIDER ISLAND ✓	✓	✓	✓			✓	✓			✓	3		
ICON BAY ✓	✓	✓	✓			✓	✓			✓	4		
KNEE BAY ✓	✓	✓	✓			✓	✓			✓	5		
ISLAND BAY ✓	✓	✓	✓			✓	✓			✓	6		
TRIP COVE ✓	✓	✓	✓			✓	✓			✓	7		
BELEEK COVE ✓	✓	✓	✓			✓	✓			✓	8		
LAKE ✓		Pencil only { having no name.									9		
LAGOON ✓		" "									10		
SPRUCE ISLAND ✓	8570	✓	D.G.N.							11			
NARROW STRAIT ✓	8570	✓								12			
KODIAK I. ✓	8570	✓	D.G.N.							13			
OTMELOI PT. ✓	8570	✓	D.G.N.							14			
COURSE PT. ✓	8570	✓								15			
UZINKI PT. ✓	8570	✓	D.G.N.							16			
NELSON I. ✓	8570	✓	D.G.N.							17			
SOUTH PT. ✓	8570									18			
EAST CAPE ✓	8570									19			
NORTH CAPE ✓	8570	✓								20			
UZINKI ✓	8570	✓	D.G.N.							21			
BLACK PT. ✓	8570	✓								22			
MT. HERMAN ✓	8570	✓	✓						✓	23			
THE TRIPLETS ✓	8570	✓	D.G.N.							24			
WOODED PT. ✓	8570	✓								25			
PROKODA ISLET ✓	8570	✓	D.G.N.							26			
C. E. Logun Rec. 16 1935											27		



Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY NO. 6048 (1933)

Spruce Island, Kodiak Island, S. W. Alaska

Surveyed July - August 1933

Instructions dated April 21, 1932 - March 25, 1933 (DISCOVERER)

Plane Table Survey.

Aluminum Mounted.

Chief of Party - H. B. Campbell.

Surveyed and inked by - H. O. Fortin.

1. Condition of Records.

The projection was checked and found to be less accurate than requested for an aluminum mounted sheet. In some instances projection lines were found to be about 10 meters out. The errors appear to be due mostly to inaccurate inking of the projection lines, which vary from extremely fine hair lines to excessively heavy lines.

The Descriptive Report is clear and comprehensive and satisfactorily covers all matters of importance.

Otherwise the records conform to the requirements of the Topographic Manual with the following exceptions:

- a. Vertical lettering was used for notes regarding rocks awash. Slanting lettering is required for features which cover at high tide.

2. Compliance with Instructions for the Project.

The survey complies with the instructions.

3. Junction with Contemporary Surveys.

Satisfactory junction was made with T-4844 (1933) and T-4843 (1933).

4. Comparison with Prior Surveys.

- a. T-2854 (1907).

A comparison of this survey with the present survey shows considerable discrepancy in the high water line, as stated in the Descriptive Report. The shoreline in places was found to be in error as much as 200 meters. The discrepancy is particularly apparent in latitude 55°53', longitude 152°21' and in latitude 55°54', longitude 152°20' where the islands and general appearance vary considerably. Some of the variance is due to a different interpretation of the high water line. The present survey located the extreme high



water line. This is a departure from usual practice but is covered in the Descriptive Report (See page 5, par. 4). For the particular case, however, it probably gives a better representation of the area from a navigator's viewpoint. A note was put on the sheet indicating that the neck (latitude  $55^{\circ}54'$ , longitude  $152^{\circ}20'$ ) covers only at extreme high tide. Although the present survey shows great care in the location of offlying rocks, four rocks are being carried forward in red (two in the vicinity of Nelson Island and two in the vicinity of latitude  $57^{\circ}57.5'$ , longitude  $152^{\circ}27.9'$ ) in the absence of positive proof of their non-existence.

The errors found in the elevations of hills and mountains are fully covered in the Descriptive Report. The practice of specifically mentioning and explaining discrepancies is commendable because it eliminates doubt regarding the corrected determinations.

5. Field Drafting.

The field inking of the survey is good except for the projection line.

6. Additional Field Work Recommended.

The survey is complete and no additional field work is required.

7. Superseding Old Surveys.

Insofar as the topography actually covered on the present survey is concerned, it supersedes the following surveys for charting purposes:

T-2854 (1907) in part.

8. Reviewed by - A. F. Jankowski, Jan. 1935.

Examined and approved:

C. K. Green, *C. K. Green*  
Chief, Section of Field Records.

*L. O. Lobbut*  
Chief, Division of Charts.

*Fred. L. Peacock*  
Chief, Section of Field Work.

*G. Hude*  
Chief, Division of H. & T.



Applied to Chart No. —

8534 (1935), 1:80,000, by James W. McGuire.

25 Jan 15, 1936  
Ealg.