

4738

U. S. COAST & GEODETIC SURVEY
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Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

_____, Director

State: Alaska

DESCRIPTIVE REPORT

Topographic
~~Hydrographic~~

Sheet No. "E" 4738

LOCALITY

Afognak Island

Izhut Bay

Between Pillar and

Peril Capes.

1932

CHIEF OF PARTY

H. B. Campbell

U. S. GOVERNMENT PRINTING OFFICE: 1928

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4738

DESCRIPTIVE REPORT
to accompany
TOPOGRAPHIC FIELD SHEET "E"

AUTHORITY

The work on this sheet was performed in accordance with the Director's orders, to the Commanding Officer, U.S.C. & G.S. S.S. DISCOVERER, dated April 21, 1932.

LIMITS OF WORK

This sheet consists of a complete topographic survey of Izhut Bay, Afognak Island, between Pillar Cape and Peril Cape.

GENERAL DESCRIPTION

Izhut Bay extends into Afognak Island about 7 miles in a general northerly direction from its entrance, between Pillar Cape and Peril Cape. Its maximum width is about 3 miles at the entrance.

At Pillar Cape the bluffs are high and steep, reaching a height of 300 feet at the extremity of the point and considerably higher to the eastward. From the top of the bluffs the slopes become easier with scattered trees and grass extending in broken ridges to a maximum height of 1924 feet at Edge Mountain.

Northwestward for a distance of about 4 miles from Pillar Cape the bluffs on the points are high and steep. In this

distance there are three open prominent bights with sandy beaches at their heads and with fresh water lakes immediately behind the 2 westerly ones. From the head of the second bight a low divide extends to the head of the western arm of Tonkin Bay. The maximum height of this divide was estimated to be 250 feet.

Around the head of the bay the country adjacent to the shore line is lower and more rolling. Timber reaches to the tops of the lower bluffs and extends back to the higher country to an elevation of between 600 and 900 feet. Above 1000 ft. the land is grass covered or bare with rock outcrop.

At Peril Cape the bluffs are high and steep running to a height of 500 ft. breaking off to a gentle slope at the tops. There is some timber at the summits.

The detail of the various arms of Izhut bay are shown clearly on the sheet.

LAND MARKS

Close under Peril Cape is a very sharp pinnacle rock 90 feet high. This rock is seen clearly from the east but blends into the bluff from other directions. This rock is located by triangulation, Tent Rock 1909-1932.

Three and one quarter miles north west of Pillar cape, close under the bluff on the point are two pinnacle rocks 25 & 35 ft. high. Station Slant is located on the inshore and higher rock. These rocks show prominently from the NW & SE.

There are a number of large rocks and islets around the bay but most of them could not be classed as land marks because they blend with adjacent topographic details.

CONTROL

Adequate control for this survey was afforded by a scheme of third order triangulation executed in 1932.

SURVEY METHODS

The plane table was used throughout. Standard practice methods as outlined in the Topographic Manual were used without exception.

Traverses were run between triangulation stations supplemented by cuts to signals from triangulation stations. All traverses closed well within allowable limits. The necessary adjustments were made in the approved manner.

Offshore rocks were located by rod readings or three or more plane table cuts.

JUNCTION WITH OTHER SHEETS

This sheet makes a satisfactory junction with Topographic
7.4737
Sheet D, 1932, at Station Low on Pillar Cape.

Contours on the east side of the bay make a satisfactory
7.4736
junction with Topographic Sheet C between Lat. $58^{\circ}-11$ and
Lat. $58^{\circ}-15$.

A satisfactory junction is made at Station Tent Rock on

Peril Cape with Topographic Sheet Reg. No. 2960, 1909.

NAMES

The southern arm on the western side of Izhut Bay which has its entrance 3 miles inside Peril Cape, is referred to on Topographic Sheet Reg. No. 2960 as Whale or Kitoi Bay. This name is shown in pencil on the sheet. No local information was found regarding the origin of this name. A number of old whale bones are scattered around the shores of this Bay.

*Name "Kitoi Bay" inked
on sheet on recommendation
by Mr. Bacon, RFA*

Respectfully submitted:

James N. Jones
James N. Jones,
J. H. & G. Engr.

Approved and forwarded:

H. B. Campbell
H. B. Campbell,
H. & G. Engr.,
Chief of Party, Ship DISCOVERER.

REVIEW OF TOPOGRAPHIC SURVEY No. 4738

Title (Par. 56) *Izhut Bay, Afognak Island, Alaska*Chief of Party *H.B. Campbell* Surveyed by *J.N. Jones* Inked by *J.N. Jones*Ship *Discoverer* Instructions dated *April 21, 1932* Surveyed in *Aug.-Sep. 1932*

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.) ✓
2. The character and scope of the survey satisfy the instructions. ✓
3. The control and closures of traverses were adequate. (Par. 12, 29.) ✓
4. The amount of vertical control that the Manual specifies for -contours-formlines- was accomplished. (Par. 18, 19, 20, 21, 22, 23.) ✓
5. The delineation of -contours-formlines- is satisfactory. (Par. 49, 50.) ✓
6. There is ~~sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts.~~ (Par. 28.)
7. ~~High water line on marshy and mangrove coast is clear and adequate for chart compilation.~~ (Par. 16a, 43, 44.) ✓
8. The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.) ✓
9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.) ✓
10. ~~The span, draw and clearance of bridges are shown.~~ (Par. 16c.)
11. Locations and elevations of summits are given. (Par. 19, 51.) ✓
12. The tree line was shown on mountains. (Par. 16g.) *Noted in Desc. Report*

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.) ✓
14. The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control. ✓
15. ~~The~~ ^{the} descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DMs and DP's, 68.) ✓
16. ~~A~~ ^{no} list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) *See D. R. for mention of two landmarks.* ✓
17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.) ✓
18. The geographic datum of the sheet is *Valdez* and the reference station is correctly noted. (Par. 34.) ✓
19. Junctions with contemporary surveys are adequate. ✓
20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.) *"Whale or Kitai Bay" was in pencil on the sheet. "Kitai Bay" was inked on recommendation of Mr. Bacon. no decision by Sec. Wright. See Desc. Rep. T2960 for use of names.* ✓
21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.) ✓
22. No additional surveying is recommended. ✓
23. The Chief of Party inspected and approved the sheet and the descriptive report after review by ✓
24. Remarks:

Reviewed in office by *R. J. Christman July 28, 1933*

Examined and approved:

L. O. Lobbut
Chief, Section of Field Records

H. Borden
Chief, Section of Field Work

W. A. Robinson
Chief, Division of Charts

G. H. Lude
Chief, Division of Hyd. and Top.

81-DRM

August 5, 1933.

Memorandum to Chief, Section of Field Work:

There is attached a copy of the review of Topographic Survey No. 4738, Izhut Bay, Afognak Island, which it is recommended be forwarded to the field party for the information of Lieut. (j.g.) James N. Jones.

In so far as could be determined by office inspection, the survey appears to be an excellent one. There are two serious omissions, however. These are the fact that no description of recoverable stations was accomplished on Form 524 and no list of landmarks for charts was furnished on Form 567.

From inspection of the sheet and knowledge of the general character of the country there is no question in regard to the fact that there are many natural features which could be well determined by the plane table and described for the purpose of recovery at a later date. In the descriptive report mention is made of two rocks as landmarks. It is considered that there are other prominent landmarks within the area of this sheet; for instance, Edge Mountain with the prominent valley northwest of it is a very prominent feature of this section.

Chief, Section of Field Records.

22-111
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Chart
RET
August 8, 1933.

To: Commanding Officer,
Coast and Geodetic Survey,
Ship DISCOVERER,
801 Federal Office Building,
Seattle, Washington.

Through: Inspector, Seattle Field Station.

From: The Director,
U. S. Coast and Geodetic Survey.

Subject: Review of topographic sheet No. 4738.

There is attached a copy of the review of topographic survey No. 4738, Ishut Bay, Afognak Island. It is desired that you bring this to the attention of Lieutenant (jg.) J. H. Jones.

In so far as could be determined by office inspection, the survey appears to be an excellent one. There are two important omissions, however. No description of recoverable stations was accomplished on Form 524 and no list of landmarks for charts was furnished on Form 567.

(Signed) R. S. PATTON.

Director.

Enclosure.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4738

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 EREGISTER NO. **4738**State ~~Port~~ AlaskaGeneral locality Afognak IslandLocality Izhut BayScale 1/20,000 Date of survey Aug. - Sept., 19 32Vessel U.S.C. & G.S.S. DISCOVERERChief of Party H. B. CampbellSurveyed by James N. JonesInked by James N. JonesHeights in feet above MHW to ground ~~to tops of trees~~Contour ~~Approximate contour~~ Form line interval ¹⁰⁰~~50~~ feetInstructions dated April 21., 1932

Remarks: _____

NAUTICAL CHARTS BRANCH

SURVEY NO. T-4738

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.