DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: Alaska

DESCRIPTIVE REPORT
Topographic Sheet No. "F" 4738

LOCALITY
Afognak Island
Izhut Bay
Between Pillar and Peril Capes.

10.32

CHIEF OF PARTY
H. B. Campbell
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. 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 consider-
ably 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 Tonki 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°11' and Lat. 58°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.

Respectfully submitted:

James N. Jones,

Approved and forwarded:

H. B. Campbell,
H. & G. Engr.,
Chief of Party, Ship DISCOVERER.
REVIEW OF TOPOGRAPHIC SURVEY No. 4738

Title (Par. 56) Igush Bay, Afognak Island, Alaska

Chief of Party W.B. Baugh Surveyed by J.M. Jones Inked by J.H. Jones

Ship Discovery 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. 88.)

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.)

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. No descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DNs and DPs, 68.)

16. No list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 18d, 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. 31.)

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 Ketsu Bay" was placed on the sheet. "Ketsu Bay" was added on recommendation of Mr. Whitaker, no decision by Sec. Board, see Dept. Ref. 72960 for not gland.

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. Christiansen July 28, 1933
Examined and approved:

L. C. H. Clark
Chief, Section of Field Records

J. J. Gordon
Chief, Section of Field Work

E. W. Kopp
Chief, Division of Charts

E. D. Etheridge
Chief, Division of Hyd. and Top.
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.
August 9, 1933.

To: Commanding Officer,
   Coast and Geodetic Survey,
   Ship DISCOVERER,
   601 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, Izhut 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) H. S. Patton.

Enclosure.

Director.
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

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 E

REGISTER NO. 4738

State Alaska

General locality Afognak Island

Locality Izhut Bay

Scale 1/20,000 Date of survey Aug. - Sept., 1932

Vessel U.S.C.G.S.S. DISCOVERER

Chief of Party H. B. Campbell

Surveyed by James N. Jones

Inked by James N. Jones

Heights in feet above MHW to ground

Contour approximate contour Form line interval 50 feet

Instructions dated April 21, 1932

Remarks:

(Handwritten notations)
### NAUTICAL CHARTS BRANCH

**SURVEY NO. T-4738**

**Record of Application to Charts**

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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.