

4334

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

E. Lester Jones Director

State: *Alaska*

DESCRIPTIVE REPORT

Topographic
~~Hydrographic~~

Sheet No. *D* 4334

LOCALITY
Kenai Peninsula

NUKA BAY, NORTH ARM

1927

CHIEF OF PARTY

R. R. LUKENS

GOVERNMENT PRINTING OFFICE

DESCRIPTIVE REPORT
TO ACCOMPANY TOPOGRAPHIC SHEET NO. D

NUKA BAY - NORTH ARM

STR. SURVEYOR - - - - - R. R. LUKENS, CHIEF OF PARTY

Work executed under instructions issued to the Commanding Officer of the STR. SURVEYOR, dated February 3, 1927.

GENERAL DESCRIPTION OF THE COAST

All of the shore line indicated on this topographic sheet is "inside" coast. The shore line is in general steep and can be approached quite closely in most cases. The land rises abruptly to moderately broken terrain, and is covered with spruce trees, alder bushes and other small shrubs, to approximately 1,000 feet elevation. Several peaks rise to an elevation of 3500 feet. These are bare and sharp. All of the rocky coast is of a slate color, in some cases almost black, and the beaches are usually coarse sand, or gravel, slate colored.

INSHORE DANGERS

Along the southwest shore of HARRINGTON POINT, there is a group of rocks awash at low water, but in ordinary weather these usually have occasional breakers, and lie close inshore as indicated. The rock awash at low water, about 200 meters south of station ISLE, does not always break, and if ROCK BAY is entered thru the narrow channel a good lookout should be kept for this rock. Two large rocks at the entrance to PILOT HARBOR occupy symmetrical positions. The northern one was used for a triangulation station and is always visible. The one near the south side is almost awash on unusually high tides, and is small in size.

LANDMARKS

No definite landmarks exist, except peaks.

SURVEY METHODS

This sheet was started before any triangulation had been established in the NORTH or LOWER WEST ARM. Work began at station MOSS, and graphical triangulation was extended to the head of NORTH ARM, over the triangulation signals, which were subsequently occupied by the triangulation party. The computed positions of all triangulation stations which had been previously located by the topographic party, required no adjustment - the plane table positions being identical with the triangulation positions.

All shore line is well controlled by triangulation, and all tributary bays are connected to the main triangulation by plane table triangulation. Details of the shore line were located by plane table cuts and traverse. No unusual methods were employed in the survey of the shore line proper. All elevations shown checked satisfactorily, and where insufficient elevations were obtained, the form lines are dotted. Because of low-lying clouds, much of the topography back of the immediate shore line in the lower section of the sheet could not be observed. The form lines shown are dotted and have been located from the GEOLOGICAL SURVEY RECONNAISSANCE MAP of this vicinity. The approximate 500 foot form lines have been shown likewise in the vicinity of NUKA RIVER. The northernmost glacier up NUKA RIVER VALLEY can be seen from SHELTER COVE (see illustration No. 1). A single cut was obtained to the foot of the glacier.

ERROR IN POSITION OF STATIONS ANY and BAD

When the hydrography was done in the small cove near the entrance to CABIN BAY on the North shore (Lat. 59 - 28, Long. 150 - 36) a discrepancy was found which seemed to indicate that signals ANY and BAD were in error. An attempt was made to adjust these positions by using the hydrographic angles but there is still considerable doubt regarding the positions of the signals referred to above. The actual procedure in doing this topography is given here. A three point fix was made at DER, rod read to BAD, and a cut to RUDE. Set up again at BAD and completed the shore line including signals ANY and RUDE by rod reading from station BAD. This work was done hurriedly because of extremely unfavorable weather and there is probably some error in the location of signal BAD. Signals DER and NUDE have been checked and are correct. The signals could not be relocated by the hydrographic party because of inclement weather and swells which prevented landing without a skiff. The soundings have been plotted on the hydrographic sheet as they were run without regard to fixes between positions 14g and 21g. The survey of this cove should be regarded as inaccurate and should be checked at the first opportunity. Signals NUDE, BAY, and COVE are recoverable. NUDE is the extreme Southerly point of the point about 20 feet above high water marks. *

NEW PLACE NAMES

The following well established local names are:
NORTH ARM, WEST ARM, MOUNT DIABLO, NUKA RIVER, SPLIT GLACIER, IRON CREEK, and HARRINGTON POINT. ✓ ^{USGS}

The following names are not in common use and are listed with those now in use.

* *Geologic Reconnaissance Map, Kenai Peninsula, Alaska, Map No 15922*

* *This area was resurveyed in 1928 and the revision applied to T. 4334. E. P. Allen June 15, 1928*

COAST SURVEY NAMES	LOCAL NAME
ROCK BAY <i>King Bd.</i>	QUARTZ BAY <i>Change to Quartz B. Recommended by King Bd.</i>
PALISADE BAY <i>King Bd. & C. Pilot</i>	SURPRISE BAY <i>GB. and US. B. B. Final GB. May 1, 1929. exact location of Bay not given in GB.</i>
SHELTER COVE <i>King Bd.</i>	BEAUTY BAY
CABIN BAY <i>King Bd. 1908</i>	YALIK BAY <i>King Bd. 1911, cancelled 1923. King Bd. & US. B. B. May 1, 1929.</i>
PILOT HARBOR <i>King Bd.</i>	EMSWEILER COVE(?)

The following names have been assigned by COAST SURVEY OFFICERS: MOSS POINT, BEAR COVE, PALISADE LAGOON, ARIADNE COVE, BEAUTIFUL ISLE and ARIADNE ISLAND.

The names: YALIK BAY, QUARTZ BAY and SURPRISE BAY should be given preference, as these names are surely established among the miners and prospectors of this vicinity and the claims thereabouts are described and filed as being on such bays.

MINING ACTIVITY

A group of prospectors have combined under the name of the ALASKA HILLS MINING COMPANY, and have started operations for gold mining on the shoulder of a mountain about three miles north north east of the mouth of the NUKA RIVER, on the east side of the RIVER. At the end of the 1927 season, this outfit had ceased operations because of lack of funds.

DOWNEY and BABCOCK, two prospectors, have a small gold mine in operation about one mile up the valley at the head of PALISADE LAGOON. They have been mining about 5 years, and have apparently struck a paying lead. Numerous other shafts and tunnels have been started in the hills in the vicinity shown on this sheet, but the general opinion of all the prospectors interviewed, seems to be pessimistic concerning the paying qualities of the gold. Most of the country is too faulted. There are about a dozen prospectors working this section. This country is cut off from the rest of the KENAI PENINSULA by ice caps, which completely surround the BAY. One man, a prospector and hunter, ~~is~~ claims to have made the trip across the KENAI PENINSULA to KACHEMAK BAY. He maintains there is a pass across the peninsula, and that he made the trip, starting up the NUKA RIVER VALLEY. He described the trip to the writer, and by comparing

his description with GEOLOGICAL SURVEY MAP of this vicinity, it is presumed that he turned westward about 15 miles N (true) of the mouth of the NUKA RIVER and followed one of the deep box canyons shown on the GEOLOGICAL SURVEY MAP. This trip is mentioned because it has been generally believed that no pass existed across the peninsula at this point.

PHOTOGRAPHS

The photographs transmitted herewith were taken on MAY 27th and 28th, 1927 and will indicate the nature of the topography around NORTH ARM. In such arms, it is felt that the careful use of an accurate panorama camera would save considerable field work in the determination of form lines. In the specific case of the 1927 season in NUKA BAY, all form lines might have been accurately established and a permanent record preserved, during the weeks of clear weather. These photographs were given to a local photographer to develop in order that they could be used immediately, and it is obvious that the work is not first class. The record obtained by a good panorama camera, properly used is invaluable, and should always be obtained where occasion will permit.

AEROPLANE LANDINGS

There are no good plane landings in the area covered by this sheet. If forced to land in this vicinity, either of the flats at the head of WEST ARM or NORTH ARM might be used. These are doubtful because of small streams and boulders. Good landings could probably be made on the ice cap west of MOUNT DIABLO at an elevation of about 2000 feet. This cap has been described to the writer by several prospectors as being smooth and level. This location would of course be undesirable except in case of emergency.

Respectfully Submitted

Seattle, Washington.
December 8, 1927.



Paul A. Smith
Jr. H. & G. E.
Topographer.

approved
R. R. Lusk
County St. Surveyor

Inspected and found adequate with the exception of the form lines in some parts of the work where there are less than the specified number of determined elevations. This is particularly true of the form lines shown with dashed lines which are from a Geological Survey reconnaissance and undoubtedly are below the usual standard of accuracy.

E. P. Wells June, 1928

NORTH ARM SHEET D

List of Plane Table Positions

Object.	Lat.	D. M.	Long.	D. P.	Remarks.
Reef	59 34	842	150 31	102	Rock south side entrance Pilot H Harbor
Nude	59 27	1654	150 35	408	Southern most extremity of point
Jack	59 35	27	150 33	718	Southern most point of large detached rock south of Bear Cove
Goon	59 31	131	150 29	190	Large lone boulder on beach
Sis	59 27	245	150 36	550	Lone dead tree south side of Cabin Bay, 1/4 mile from entrance

Report to Accompany Supplement to Topographic
Sheet "D" Nuka Bay May 7, 1928.

The work shown on this sheet was done May 7, 1928 to correct an error of topography on the original sheet done in 1927 by P. A. Smith. The hydrography disclosed a discrepancy in the signals in this vicinity and as no apparent error could be found in the work, the topography and hydrography was done again. As was stated in my report to accompany Topographic Sheet "D" of Nuka Bay this section was done hurriedly under most unfavorable weather conditions and was extremely doubtful. The correction has accordingly been made.



Paul A. Smith
Jr. H. & G. E.
Topographer.

Arthur Cove
Nuka Bay
May 9, 1928.

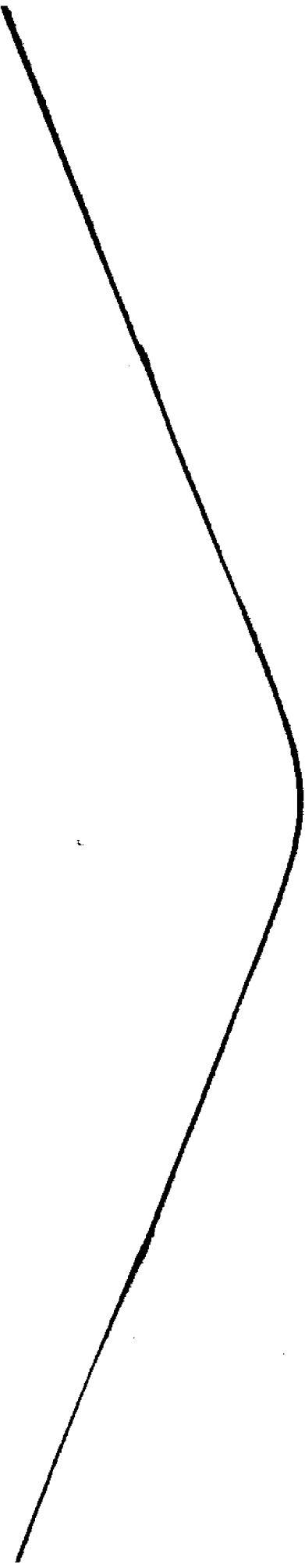


The resurvey described above was submitted to the office on a new sheet. The new work has been applied to original sheet 4334 and the new sheet has been destroyed.



Chief, Field Records Section.

June 15, 1928.



8 Photos
T. 4333

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1836

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1924
AGA Pilot

May 28, 1927

10:20 AM

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AG

B4

4334

Note on back

R4-E6

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P.A. Smith

May 28, 1927

~~10-15-1927~~

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Sheet D
Nuka Bay

4334

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Report on Geographic Names, Topographic Sheet No. 4334

Nuka Bay, North and West Arms, Kenai Peninsula, Alaska

The following names have been approved by the Geographic Board and may be used in our publications:

Surprise Bay to be used on chart conforming to local usage.
Not referred to Geog. Bd. Palisade Bay (C.P.) and Geog. Bd.
HB. 7/2/24 Mount Diablo, ~~Surprise Bay~~, Shelter Cove, Yalik Bay, Pilot Harbor.

The name Surprise Bay on the Geological Survey map of this locality corresponds to the Palisade Bay on this sheet and also to the Palisade Bay in Coast Pilot. Retain the name as found in Coast Pilot and on this sheet till Geog. Bd. have made a decision.
The following names have been published by the U. S. Geological Survey: North Arm, Split Glacier.

The following names are reported to the U. S. Geographic Board as being well established by local usage:

West Arm, Nuka River, Harrington Point.

There are numerous Iron Creeks, which makes this name undesirable.
Ferrum Cr adopted by H.B.

The following names assigned by the field officers are recommended to the Geographic Board for approval:

Palisade Lagoon, Ariadne Cove, Ariadne Island, Beautiful Isle.

Bear Cove is not acceptable because of numerous repetitions.

Moss Point is duplicated in Moss Cape in another part of Alaska and may be rejected by the Geographic Board.

The following names are recommended by the reviewer and sent to the Geographic Board for approval:

Storm Mountain, Palisade Mountain, Yalik Point.

The following change of name is recommended to the Geographic Board because of change in local usage: Quartz Bay instead of Rock Bay.
Approved by H.B.

For other names on page 3 would use the following: Surprise Bay, Shelter Cove, Yalik Bay, Pilot Harbor.

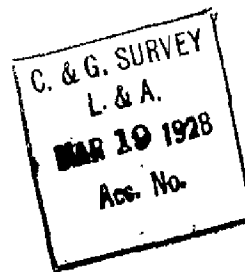
*Cabin Bay by decision of Geog. Bd.
Use Cabin Bay unless changed.*

await Geog. Board Decision before changing.
OK.

H. Bacon.

June 27, 1928.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY



REG. NO.
4334

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 No. D

REGISTER NO. **4334**

State Alaska

General locality Nuka Bay Kenai Peninsula

Locality North and West Arms of Nuka Bay

Scale 1:20,000 Date of survey May, June, July 1927

Vessel SURVEYOR

Chief of Party R. R. Inkens

Surveyed by P. A. Smith

Inked by P. A. Smith

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

Contour, Approximate contour, Form line interval 100 feet

Instructions dated February 3, 1927

Remarks: _____

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.

Field No. _____

REGISTER NO. **4334** Add'l Wk.

State Alaska

General locality Nuka Bay Kenai Peninsula

Locality Cabin Bay

Scale 1:20,000 Date of survey May 7, 1928.

Vessel SURVEYOR

Chief of Party R. R. Lukens

Surveyed by P. A. Smith

Inked by P. A. Smith

Heights in feet above _____ to ground to tops of trees

Contour, Approximate contour, Form line interval _____ feet

Instructions dated _____, 192

Remarks: To correct error in original Sheet "D" Nuka Bay 1927.

To be incorporated with original sheet 4334

610

*This work has been appended to T. 4334 and
the revision sheet destroyed.*

E. P. Ellis

June 15, 1928