

3781

Form 504  
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

State: *Alaska*

11-5013

DESCRIPTIVE REPORT.

Topo. Sheet No. *3781*

LOCALITY:  
*S.W. Alaska*  
*Kodiak Island,*  
*Cape Grant to*  
*Ikolik*

*20000*

1919

CHIEF OF PARTY:  
*Hardy, D. H.*

C. & G. SURVEY  
FEB 20 1920  
S. No.

1873

## DESCRIPTIVE REPORT

To Accompany Topographic Sheet Number One.

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To the Superintendent:

Under your instructions of May 16, 1919, a topographic survey was made in the vicinity of Halibut Bay, on the southwest side of Kodiak Island, Alaska, by a shore party from the "SURVEYOR", in September and October, 1919.

### Limits-

The sheet embraces that portion of the shoreline of Kodiak Island between and including Cape Grant and Cape Ikolik, and extends from Latitude 57-14 to 57-26 North; and from longitude 154-37 to 154-53 West.

### Control-

The control for the survey was from triangulation done by this party in August and September 1919.

### Method-

The survey was made by Plane Table. From a three point location near  $\Delta$  Hut traverses were run north and south along shore. The signals used for the initial location were  $\Delta$  Middle,  $\Delta$  Ridge, and  $\Delta$  Grant.  $\Delta$  s Hut, Mound, and Spit were at first located by Plane Table. Later, having been included in the local triangulation, their positions were computed and these positions when plotted were found to check with the plane table positions.

The numerous well defined summits near the shoreline were carefully located for use as hypographic signals.

For the work in Gurney Bay, a three point location was obtained from  $\Delta$  Middle, and two summits previously located from Halibut Bay. Using this point for orientation, the more exact location was obtained by resection from  $\Delta$  Ikolik.

### General Description-

The locality is treeless, covered with tall grass or reindeer moss on the flats, and on the hill sides, and with patches of stunted alders and willows in the sheltered valleys along the streams. The upper portions of the hills are rocky and jagged.

From Shelikoff Strait, the most prominent features of the shoreline are: Cape Grant, Middle Headland, and Cape Ikolik. Cape Grant shows a ridge running in a general southwest direction and terminating at its seaward end in sharp bluffs, and along its north west face in earth and rock bluffs and earth slides. On the backbone of the ridge about 1/2 mile back from the end is a prominent sharp finger of rock.

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Middle Headland shows a jagged "saw tooth" outline, and high black cliffs on the seaward face. Cape Ikolik shows high black cliffs from the strait, and from the northwest is seen to terminate in a jagged line of pinnacles.

Along shore around Cape Grant, numerous boulders line the foot of the bluffs, and kelp appears for about a quarter mile off shore. Earth bluffs extend along behind the sandy beach in the northern half of Halibut Bay. Midway of the bay a low, well defined mound near the beach forms a good landmark. The lagoon which extends from the south end of the bay is accessible to launches at high tide, but at low tide except near the mouth has only the fresh water outflow. Along the shore of the bay, just below the low water mark, the beach runs off to a considerable distance on a very gradual slope, which makes landing difficult in a sea at any time near low water.

Between Middle Headland and the double rocky pinnacles known as Tombstone Rocks, tide rips exist in rough weather. South of Middle Headland the shoreline consists of steep black cliffs for a distance of about two miles, where a three quarter mile sand beach begins. From the end of this, two rock bluffs, with a short beach between, extend to the small bay inside of Cape Ikolik. This bay, locally known as Gurney Bay, is used as an anchorage by local fishermen. The best landing here is near the small bight at the western end of the beach, about 1/3 mile from the end of the bluffs. Around Cape Ikolik, and for several miles to the southeast, the shoreline consists of high black cliffs. To the north and east from the cape the seaward approach appears clear to close up to the bluffs.

Sail Rock, roughly triangular or fin shaped, lies well off shore between Middle Headland and Cape Ikolik.

Lighthouse Rock shows clear from Cape Ikolik from the north or south.

#### Unfinished Work--

On account of rough weather, the work in the bay south of Middle Headland, and around Cape Ikolik, had to be left and sketched in. A ledge which bares at three quarter tide lies off shore about midway of the Northern shore. Off the beach at the northeast end of the bay there appear to be submerged rocks. On account of the exposed location of the cliffs along the shore of the bay and around Cape Ikolik this locality will have to be done in smooth weather. It will also have to be done with the aid of a boat, as the cliffs are in general unscalable, and travel along shore beneath the cliffs is not possible.

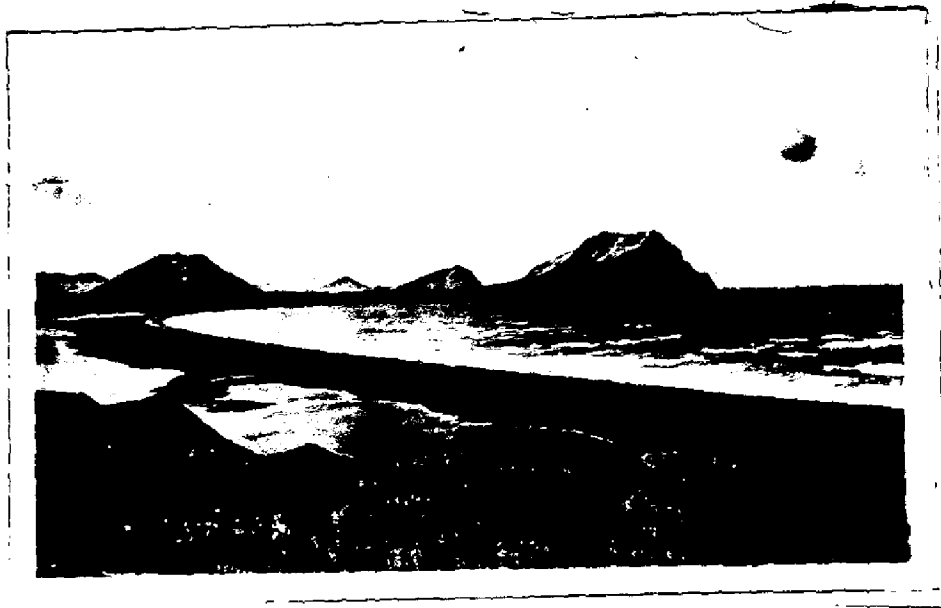
Respectfully submitted

Hyd. and Geod. Engineer  
Chief of Party.

PLANE TABLE POSITIONS.

Station and Description	Latitude D.M.	Longitude D.P.	Height	Remar
Rocky pinnacle on Cape Grant.	57-25	1039	154-42	585 1200 est.
Hike. Nail set in drill hole in boulder.	57-25	215	154-43	392
Grassy. High grassy pinnacle on point.	57-25	90	154-43	128 100 est.
Be. Ctr. of 4 ft. cairn of rocks at H.W.	57-25	170	154-42	203
6 ft. post set in bank, 6 ft. above H.W.	57-24	835	154-41	856
Peak back of small lagoon.	57-23	440	154-40	244 244
Peak, 1000m back from shoreline.	57-22	1504	154-41	544 747
Low peak near shore.	57-22	1065	154-42	519 275
Low rounded peak.	57-22	468	154-42	126 310
Peak on Ridge.	57-22	243	154-41	420 800
Peak on Ridge	57-21	1735	154-41	345 964
Peak on Ridge.	57-21	1490	154-41	190 1004
Peak.	57-21	1192	154-40	78 1210
Peak.	57-21	675	154-40	24
Peak on shoulder.	57-21	493	154-40	602
North pinnacle on middle.	57-21	1389	154-46	625
Top rky. bluff.	57-20	1699	154-44	970 796
Peak.	57-20	1521	154-45	175
Peak.	57-20	925	154-45	543
Peak.	57-20	925	154-47	95
Peak.	57-20	431	154-45	716
Peak, S. shore.	57-19	1709	154-46	649
Pinnacle on ridge.	57-19	1574	154-45	960 West end.

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Middle Headland, looking southwest  
from the low hill back of signal "Mound".



Cape Grant, looking north from  
the low hill back of signal "Mound".

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

SECTION OF FIELD RECORDS.

Report on Topographic Sheet 3781.

Surveyed in 1919.

Chief of Party: F. H. Hardy.

Surveyed by E. M. Wilbur.

Drawn by E. M. Wilbur.

1. The records of this survey as contained in the descriptive report conform to the General Instructions.
2. The plan and character of the survey fulfills the requirements of the General Instructions, except that the magnetic meridian is not shown, elevations of off lying islets (particularly Tombstone Rocks) should have been given, and authority cited for several new names which do not appear on the chart or in the Geographic Dictionary of Alaska. The descriptive report should have given some description of the region in the interior, and information as to the extent that the locality is settled.
3. The plan and extent of development satisfies the specific instructions.
4. The office draftsman did not have to do over again any part of the drafting done by the field party.
5. No further surveying is required between Cape Grant and Middle Headland, but the coast southward will require surveying.
6. Rating of the work: Character and scope of the surveying: Good.  
Field drafting (quality): Excellent.
7. Reviewed by L. P. Ellis, October 8, 1920.
8. Two copies of this report to be sent to Division of Hydrography and Topography.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The finished Topographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 3781

State . Alaska . . . . .

General locality . S.W. Alaska . . . . .

Locality Kodiak Island, <sup>Cape Grant to Cape Ikolik</sup>  
~~vicinity of Halibut Bay~~ . . . . .

Chief of party . F.H. Hardy . . . . .

Surveyed by . . E.M. Wilbur . . . . .

Date of survey . Sept. - Oct. - 1919 . . . . .

Scale . . . . 1 to 20,000 . . . . .

Heights in feet above . . Mean High Water . . . . .

Contour interval . 100 . feet.

Inked by E.M. Wilbur . . Lettered by E.M. Wilbur . . . . .

Records accompanying sheet (check those forwarded): Photographs,

☒ Descriptive report, Horizontal angle books, Field computations,

Data from other sources affecting sheet . . . . .

Remarks: