

3305, 3305 a
3305 *ADD. WK.*, 3306

3307
3307 a

3305
3305 a & *ADD. WK.* 3306
3307
3307 a

Diag. Cht. No. 8859 & 8860-1

Form 504	
U. S. COAST AND GEODETIC SURVEY DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey	HYDROGRAPHIC
Field No.	H-3305, 3305a, H-3305 (Add. Wk.), H-3306, 3307, H-3307a
Office No.	
LOCALITY	
State	ALASKA
General locality	DOLGOI IS. VOLCANO BAY, &
Locality	BILKOFSKI BAY & UIGA ISLAND
194 11	
CHIEF OF PARTY	
W. E. Parker	
LIBRARY & ARCHIVES	
DATE	JANUARY 23, 1912

93
SHA
1911
P

Dolgai I. & Volcano Bay

U.S. GEOLOGICAL SURVEY,
LIBRARY AND ARCHIVES
JAN 23 1912
Acc. No. 55-55013

8860-1

3305

3305a

62
161043

Department of Commerce and Labor
COAST AND GEODETIC SURVEY
8860-1 Superintendent

State: *Alaska*

DESCRIPTIVE REPORT
H Sheet No.

LOCALITY
*Alaska Peninsula
Dolgai I. & Volcano Bay
Bilkafski Bay &
Unga Is.*

1901

CHIEF OF PARTY:
H. E. Parker

(Add Work)

3306

3307

3307a

3305

3305a

3305a

3305a

3305a

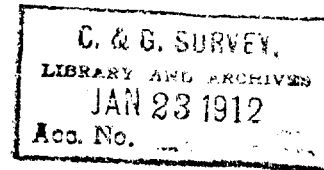
C. & G. SURVEY,
LIBRARY AND ARCHIVES
JAN 23 1912
Acc. No. _____

Descriptive Report
to accompany
Hydrographic Sheets
Nos. 3305, 3305^a, 3306, 3307 and 3307^a
Southern Side of Alaska Peninsula

Surveyed by Party on *St. Patterson*
May to Oct. 1911.

W. E. Parker, Asst. Comdr.
Chief of Party.

DESCRIPTIVE REPORT.



to accompany

Hydrographic Sheets Nos. 3305, 3305a, 3306, 3307
and 3307a, southern side of Alaska Peninsula.

This report covers in a general way the southern side of the Alaska Peninsula westward from the Shumagin Islands, southern side of Unimak Island and the neighboring smaller islands and water areas to the southward of both and, in more detail, the land and waterways along the inside ship passage between Pavlof Bay and the Ikatan Peninsula.

Geographical features and appearance of country:

The lower part of the Alaska Peninsula and the neighboring islands are mountainous and rugged; but there are large areas of comparatively level or gently sloping land between or surrounding the mountains. Along the southern side of the Peninsula and Unimak numerous peaks and ridges, from a few hundred to two thousand feet in elevation, rise abruptly from the coastline while mountains of greater height, probably three to four thousand feet, lie but a few miles back. Above these tower six prominent peaks, all but one over five and some over nine thousand feet in elevation.

The southern coast is indented by four wide, deep bays, three of which reach nearly across the peninsula, and several smaller bays and bights.

Around the shores of these are broad areas of low, flat land beyond which the surface slopes gently to the bases of the mountains. But in places the mountains rise abruptly from the coast and here the shores are bold and rocky. From the heads of several small bays the lowlands extend to the Bering Sea, affording easy travel~~ing~~ across the peninsula.

Between the bays are bold, rocky headlands often terminating in precipitous faces several hundred feet high.

Southward from the peninsula are numerous islands and islets all resembling the mainland in topography only on a smaller scale.

There are three characteristic features in this country, the high mountains referred to above, the sheer rock faces presented by many of the headlands and islands, in appearance as if half of the mountain had been cleaved off by a single vertical blow, and lastly small sand spits extending from the coast at the most unexpected places.

The whole country, except where slides and erosion have prevented growth, is covered with grasses and mosses up to an elevation of two thousand feet and in places higher. Above this elevation the surfaces of the mountains appear to be covered with loose rock. Firm rock is found near the coast usually characterized by vertical cleavage, resembling innumerable columns set close together. The lowlands are covered with thick growth of moss and rank grasses.

Snow remains on the higher elevations until late into the summer and is always present in the high mountain valleys and on the highest peaks.

Weather:

The weather along the Alaska Peninsula is moist and cool the year round. The rain and snow fall are excessive and there are long periods of cloudy, rainy and moist weather. During the past summer but twenty-nine days of clear weather were recorded from May 18th to October 1st. Snow fell at

sea level until June and on the peaks well into the summer. It extended far down the slopes at the close of September and fell at sea level on October 5th. Fog and mist may be expected at any time from spring until fall and often lasts for several days.

Mountains:

On a clear day six prominent peaks can be seen standing high above all the surrounding mountains and easily identified. All are fairly symmetrical in shape, have steep but uniformly sloping sides and terminate in summits of small area. The highest elevation of each appears a fairly definite point.

Patlof Volcano, nearly nine thousand feet high, has three distinct peaks lying in a general north-south line, the middle of which is the highest. Smoke can be seen at times issuing from the central peak and from crevasses in the sides.

Frosty Peak, five thousand and eight hundred feet in elevation, is less regular in outline and has several peaks one of which however rises above all others.

Round Top, six thousand and one hundred feet high, appears more symmetrical than either of the former and has one rounded summit.

Isanotski is recognized by its twin peaks, each over eight thousand feet and nearly of the same height.

Shishaldin is a very beautifully symmetrical volcanic cone over nine thousand feet in elevation. It has been reported active within the year but no signs of activity were seen this summer.

Pogromni, six thousand and five hundred feet in elevation, rises among other mountains of considerable elevation and so does not show to advantage from the Pacific side. Its slopes are easier than those of any of the others described above and its summit appears less well defined. The first

two of these mountains are on the mainland and the others on Unimak Island.

Sannak Peak, on the northwest corner of the island of that name, while lower than many mountains on the mainland, is, from its geographical position, a prominent land mark. It is smooth and symmetrical in outline and its sides slope gently into the low rolling plains to the southward and eastward. From its northwestern side a rocky shoulder extends nearly to Acherk Harbor.

Inside passage along the southern side of the Alaska Peninsula:

The usual route for steam vessels bound for Unalaska and the Bering Sea from southeastern Alaska or Kodiak is through Goïman and Unga Straits, in the Shumagin Group, then between Ukolnoi and Dolgoi Islands and the mainland, between the Iliasik Islands, then between Deer and Fox Islands and the mainland to Cape Pankof where a course is laid to Unimak Pass. Vessels bound for Unalaska then either continue through the Pass to the Bering Sea and pass northward of Akun and Akutan Islands or, if the tide is favorable in Unalga Pass, take Avatanak Strait and enter Bering Sea through the latter Pass. Akutan Pass is not much used on account of a reported rock in midchannel, the existence of which, although doubtful, is still believed by local navigators. This route is used by all steam vessels except those that lay direct courses from Seattle and San Francisco to Unimak Pass, and during the past summer probably a hundred vessels of all kinds passed along this track.

Dolgoi Island:

Southward from Pavlof Volcano is Dolgoi Island two miles distant from the mainland. It is eleven miles long in a northwest-southeast direction and from four to seven miles wide. The major portion of this island is upward of a thousand feet in elevation and at the two extremities the moun-

tains attain elevations of fourteen hundred to fifteen hundred feet, all covered with vegetation. The coastline is irregular in outline, bold and rocky. In the center of the island is Dolgoi Harbor a long narrow body of water extending from the southwest side nearly across to the northeast shore and in area about one fifth that of the entire island. No hydrography has been done off the northeast and southeast shores although the Patterson steamed along the northeast shore from the northermost point to the first little islet at a distance off of half a mile and crossed over to Ukolnoi Island and back without finding any dangers; and the topographic party, working from a launch, reported no visible dangers on this side. The vessel ran in within a hundred yards of the shore at signal "Last" getting ten fathoms.

The northern point is an overhanging ledge a hundred feet high sloping southward to a narrow rocky shore. Deep water was found close to this shore.

Bluff Cape is a sheer rocky headland fifty feet high from which the land slopes down and back in a smooth grassy surface to the level of the low shores of the bight eastward of it. From the southward three similar rocky points are seen with Bluff Cape showing to the left and above the others; but from the northeastward Bluff Cape alone stands out. It is from any direction an unmistakable and prominent landmark. (See photos forwarded with seasons report). Deep water was found within two hundred yards of Bluff Cape and the points northeastward from it; but there is kelp and foul ground east from the Cape extending around into the bight which should be approached cautiously, especially just east of the Cape.

Eleven Foot Rock:

The only known danger off this coast is a rocky ledge on which the least depth found was eleven feet at low water, from a careful examination made

from a pulling boat. This ledge is marked by a scant growth of kelp which however does not show conspicuously except at low water and ⁱⁿ a smooth sea, and it is so sheltered from the ocean swell as to rarely if ever cause a breaker. It is exactly on the prolongation of a line tangent to the outer face of Bluff Cape and to the vertical rocky cliff at the extremity of the visible mainland, and from this rock the north point of Dolgoi bears 102° (True).

On the south side of Bluff Cape is a shallow bight near the northern shore of which can be seen a log cabin close to the water. Good anchorage in from eleven to fourteen fathoms, mud bottom, was found off the middle of this bight four hundred to six hundred yards from the shore.

A sand spit four hundred yards long extends southwesterly from Dolgoi towards Goloi Island with deep water close up to it.

Dolgoi Harbor:

This is the safest and most commodious port of refuge in this part of Alaska. The Patterson anchored here frequently in all kinds of weather and found perfect shelter from the sea and freedom from williwaws. The harbor has an area, above the islands, two miles long by two thirds of a mile wide between the five fathom contours, where depths vary from six to ten fathoms, all over mud bottom. The entrance to this anchorage is, in places, about two hundred yards wide between the five fathom contours, but is easily navigated at any time.

Two small islets, called Entrance Islands, lie at the entrance to the harbor on the west side of the channel. They are respectively forty and fifty-five feet high; the former, nearer to the channel, is a bare rock while the other is covered on top with grass and sod, and both are the breeding places of many sea-gulls. Inside of the harbor are two larger

islands, the first, nearly midway between adjacent shores, is long and irregular in shape and rises to elevations of one hundred and twenty and one hundred and sixty-seven feet respectively at its middle length and at its northern extremity. North of this is the second island nearly round in shape and 189 feet high at its central point. The surfaces of both are covered with grass except near the water level where bare rocks show clear. Eastward from the larger island is a prominent water fall from which water can be boated readily at high tide and without great difficulty at any stage. The supply held through the summer.

To enter this harbor pass Entrance Island, the southeastern one, at a distance of 100 to 200 yards and steer north (magnetic) for the highest part of the ridge on the north side of the harbor showing west of the islands. When up to the northern end of the first island haul to the eastward to pass midway between this island and the one to the north of it. Anchor anywhere eastward of these islands in six to thirteen fathoms or continue northward to the larger anchorage north of the upper island. The holding ground is good anywhere here. Avoid the north end of the first island and the southern and northern ends of the second island where ledges protrude 100 yards from the shore. The passage westward of the upper island is good for four fathoms; and, if using this, pass the upper island at a distance of 150 yards and when clear of the northern end haul eastward a couple of points to avoid the shoal on the west side of the bay above the island. There is a passage eastward of the first island, good for four fathoms, but this is not recommended as the channel is narrow and submerged rocks lie close to it on either side.

One Foot Rocks:

One each side of the approach to Dolgoi Harbor are rocks over which there is a least depth at low water of one foot but neither is near enough

to the usual track to offer any danger. Both show breakers in moderate south-easterly swells and are marked by kelp which however is very scant over the rock south of the approach. The southern rock is one statute mile 222° (true) from the cluster of rocks at the southern side of the entrance and the other is about the same distance 262° (True) from the northern Entrance Island and is nearer to Goloi than Dolgoi Island. The ship was within 150 yards of the former rock at one time when no sign of it could be seen.

Volcano Bay:

This bay is three and a half miles wide at its mouth and five miles long, is the first prominent indentation in the coast westward from Pavlof Bay. It is free from all hidden dangers and offers good anchorage at its head in depths of three to ten fathoms, but is deep below there. The northeast shore is bold and rocky as far as Δ East Base and has deep water close up to it. From Δ East Base around the northwest end nearly to Δ Bluff the shore is low and swampy ending in extensive sand flats uncovered at low water. Depths decrease rapidly on approach to these flats and it is not safe to anchor in less than ten fathoms, but good anchorage at this depth can be found any where along here. A short sand spit makes out from the western shore forming a small bight north of Δ Bluff and affords some shelter from southeasterly winds especially for small vessels which can anchor close in under the lee of the spit in two fathoms. The Patterson was anchored twice in six to seven fathoms, soft bottom, just inside the end of the spit on angles: Point to Wash $34^{\circ} 20'$ to West Base $73^{\circ} 20'$. Several streams enter the bay here but it is difficult filling boats on account of the shoal depths at their mouths. At times water can be got easily from little rills opposite Δ Bluff. South of the spit the shore is foul to Bear Bay and there is no anchorage there.

Bear Bay - This arm, two miles long by one half mile wide, opens into Volcano Bay at its southwestern corner. A sand spit nearly closes this bay at one third of its length, leaving a narrow channel navigable by small boats only.

Arch Point is the name given by this party to the eastern point of entrance to Volcano Bay. It is a precipitous rocky headland cut through in several places at its extremity forming caves and arches, through one of which, from a position southeast of the point, the grassy slope behind can be seen. The rock is dark in color near the water changing to light brown above and is covered with vegetation on top. It is easily recognized from any position. At high tide this point is nearly cut off by a shallow lagoon which opens into Volcano Bay two and one half miles inside the point. Back of the lagoon, one and a half miles from the coast, is a long ledge of rocks cleaved vertically and resembling innumerable columns set close together; above which is a flat tableland. Northeastward from the point the shores are low and flat sloping gradually back to this ledge and are flanked by flats and foul ground. Deep water reaches to Arch Point, but northeastward from it shoals and rocks stick well off shore. A local attraction of three quarters of a point was noted at the magnetic station near Δ Knob and while passing close to this point, steering the vessel by ranges, the compass was observed to change over half a point.

Coast southward of Volcano Bay:

From the entrance to Bear Bay to the southward the coast is rocky and foul for a distance of three miles to a sand spit and should not be approached closer than five hundred yards. The end of the spit is free from hidden dangers but there is an area of shoal water south of the end of the spit and sunken rocks and kelp in the bight. A rock uncovered at all stages of the tide lies in the center of this bight two hundred yards off shore.

One and a half miles southwesterly from the sand spit at © Cob is a vertical ledge of rocks three hundred to five hundred feet high. This ledge and Bluff Cape form the range referred to above for clearing the Eleven Foot Rock.

Black Rock is a large dark colored, irregular shaped column fifty-seven feet high, about one hundred yards off the shore line, nearly a mile beyond © Cob. Depths of twenty-seven feet were found within a hundred yards of its outer face and double this depth at about twice this distance.

From Black Rock the shore trends in a general southwesterly direction for three and a half miles to the mouth of Belkofski Bay but curves inward slightly at one half this distance forming a long shallow bight. The land rises abruptly from a rocky beach to an elevation of about fifty feet and then slopes up gradually to the base of the mountains. Depths decrease gradually on approach to the bight and there is temporary anchorage in five or six fathoms, sand bottom, eastward of the village; but a dangerous sea piles in here during easterly to southeasterly weather.

Belkofski, the only permanent habitation in this vicinity, occupies the shore along the southern part of this bight. It is a native village of perhaps thirty dwellings and a quite pretentious Greek Church which stands out conspicuously from the northeast around to south. The church is in charge of a Russian Priest, who with a Scandinavian trader sometimes located here, constitute the entire white population. The monthly mail boat to Unalaska stops here on the outward passage and again on its return when wind and sea permit a landing, but frequently weather conditions prevent a stop on one or both passings.

Goloi Island:

Goloi Island lies in the space between the southern part of Dolgoi Island and the mainland dividing it into two navigable passages either of

which may be used with perfect safety but the western one is more direct and is used exclusively at present. A sand spit stretches west from Goloi and, with a nearly opposite spit on the mainland, appears from a position off Bluff Cape to leave a very narrow passage. This spit like the former may be approached with perfect safety, and in reality the passage between is ample for all vessels. The passage north of Goloi Island offers an easier approach to Dolgoi Harbor from the northward. The Patterson's course through here on several occasions was, pass the sand spit on Dolgoi at a distance of 300 to 400 yards, ~~235~~¹²⁵° (True) steering for the southern Entrance Island.

Iliasik Islands :

The Iliasiks are two high mountainous islands each three miles long by a mile or less wide lying one beyond the other in a northwest-southeast line, which is also the direction of their axes, southward from Dolgoi and Goloi Islands. The northern island, known as Inner Iliasik, is separated from the mainland by a mile and a half of water and from the other island, Outer Iliasik, by about a mile and a quarter. Both islands have two areas of high land between which are narrow stretches of lowland which sink below the horizon from a short distance away giving the mountains the appearance of four separate islands.

Inner Iliasik is characterized by a nearly vertical rock face rising from the water on the east side to the summit of the northern mountain. The profile of this part of the island seen from the eastward is extremely rugged and irregular. (See photo). The coast is rocky except in the bights on each side of the connecting link of low land and fringed with rocks extending from 100 to 300 yards off.

Outer Iliasik is much like the other except that its elevations have

somewhat easier slopes and there are no extensive ledges. Foul ground and bare rocks extend half a mile west of the western end of this island.

Between these islands is a clear passage not less than eight fathoms deep in midchannel decreasing to four fathoms as the islands are approached. Viewed from a distance to the northward the rock on which is \odot Ode appears in midchannel and no clear passage can be seen; but as one gets closer the passage opens and all difficulties disappear. Bound from the westward one should be careful not to get too close to the southern end of Inner Iliasik.

A narrow ledge of rocks extends from the northern end of Inner Iliasik to the mainland; but this may be crossed close to the mainland carrying a least depth at low water of twelve feet over a narrow backbone of rock. The Patterson, drawing fourteen feet, crossed here twice steering about 240° (True) with the sand spit on Dolgoi open slightly on the northern end of Goloi, passing Black Rock at a distance of not over 450 yards. The reef southward of our crossing is marked frequently by tide rips and broken water. This passage is not recommended for any but light draft vessels as the tendency would be to cross too far from Black Rock. W

Westward, from Kitchen Anchorage in Belkofski Bay, the shore has been sketched from plane table locations on the shores, from locations from theodolite angles on the shores and tangents from these stations as well as from the triangulation stations and lastly from sextant cuts from the vessel. One line of soundings was run nearly around Belkofski Bay and several lines of soundings between Deer Island and the mainland. Westward from Deer Island several lines of soundings were taken and some reconnaissance with submarine sentry done.

The point, southwestward from Belkofski at the east side of the entrance to Belkofski Bay, is fringed with sunken rocks to a distance of about 550 yards, the outer limit of which to the westward has not been fully determined but appearances indicate that this is the outer limit of dangers.

Belkofski Bay is an irregular shaped body about seven miles long and from two and a half to five miles wide. Two coves, known as Kitchen Anchorage and Captain's Harbor, opening into the eastern side, are reported to afford fair anchorage for moderate size vessels. Kitchen Anchorage will probably be the site of a salmon cannery within the next year. The shore is rocky to Captain's Harbor except at the head of Kitchen Anchorage where there is a gravel beach. Shoal water and rocky bottom extend off the point south of the anchorage, vicinity of *O* Face, for about four hundred yards. A sunken ledge covered with kelp reaches off fifty yards from the point on the north side. The head of the bay has a sandy beach backed by grassy flats of considerable width. This shore was sketched by the topographic party from weak control and seemed to the writer, when viewed from the deck of the vessel, located by sextant angles, to recede less than the topographic ^{sheet} shows. The west side of the bay is rocky along the base of the mountains to the flats on the west side where there is perhaps a mile and a half of stone and gravel beach. Below there the shore is rocky around to Bold Cape and beyond. Two miles northward of *A* Slope a rocky point sticks seven hundred yards off the general shoreline with two detached rock columns, grass-covered on top, standing a short distance beyond. A ledge extends one hundred yards northward from the columns and a somewhat less distance southward.

The bay is deep and apparently free from all hidden dangers except close inshore.

Bold Cape, westward from Belkofski Bay, is as the name implies a bold rugged headland faced with vertical cliffs above which the mountain rises in steep rock-strewn slopes. Signal Back is a rocky pinnacle, the height of land here. Several prominent boulders stand a few yards off the shoreline.

King's Cove is the end of a deep narrow valley stretching back inland

between the high mountains that terminate close to the water, on the one side at Bold Cape and on the other at A King. A sand spit extends from the east side nearly across the cove and is overlapped at its western extremity by a similar but shorter spit from the east side, between which there is a narrow channel to the upper bay. This upper bay is perhaps two miles long and trends in a northeasterly direction to a river delta and sand flat. It is at least three fathoms deep and probably more over most of its area. Sea otter boats and small craft anchor here, passing in at high water, for the passage westward of the long spit is, at low water, too shallow for any but pulling boats. There is depth and swinging room for small vessels to anchor in the arm north of the west spit and passage in to here at any time.

At the head of the other bay on the long sand spit a salmon cannery was erected this last spring by the American Pacific Fisheries of Bellingham, Wash. The plant consists of a wharf, cannery, a store and bunk house. The pack was reported at twenty-six hundred cases of red and dog salmon; but, according to the Superintendent, the small catch was due to lack of traps, all fishing was by nets, and to ignorance of the best fishing ground. Last fall the company contemplated moving the plant to Kitchen Anchorage this coming season on account of the poor water supply of the present location. Fish were taken last summer from Sannak Islands, from the vicinity of Thin Point and from Long John's Lagoon eastward of Volcano Bay.

The lower bay is deep and free from all dangers except close inshore. The anchorage is at the head close to the sand spit, off the wharf and eastward of it in fifteen to eighteen fathoms, mud bottom. The holding ground is poor along the west side. Williwaws are violent and even dangerous at this anchorage during fresh northwest winds.

Between King's Cove and Cold Bay the coast is rocky and lies close to

the base of the mountains. Δ Cold is on a rocky grass-topped point 30 or 40 feet high at the entrance to Cold Bay. Large local attraction was observed at this station. At the triangulation signal the observed declination was 29° while forty meters from it 32° was measured.

Thin Point, on the west side of Cold Bay, differs greatly from the drawing of Chart No. 8860. This shoreline is sketched from intersection cuts taken from the vessel while running the hydrography on sheet No. 3306 and is only approximate but certainly far better than anything yet published. Thin Point is a long blunt point of low flat or gently sloping sand and gravel covered with grass. The extremity is an eroded yellow sand bank, to the westward of which stretches a reef uncovered at low water. A smooth symmetrical grassy hill, the summit of which is Δ Hill, stands out conspicuously as the only high land near the point. Shoals and probably rocks extend southward from the point but not as far as shown on the chart.

Beer Island:

The central portion of this island is a series of high conical peaks many of which are so nearly of the same elevation as ^{to} ~~to~~ recognized with difficulty from different directions. Sharp, ^{is} probably the highest and is the most easily identified from the waters of the inside passage. The northern shore from the vicinity of Δ Deer to West Cape is quite accurately sketched from sextant cuts and probably is sufficient for chart purposes. The remainder of the shore is sketched between tangent cuts from the triangulation signals and its accuracy is not vouched for except as showing the general shape and size of the island.

Stag Point, at the northern end, is a short sand spit, except for which the shore is rocky to the little stream opposite Fox Island.

At \odot Rock there is a little rocky point off which lie two small rocks above high tide, the outer end of which is the station.

West Cape is a ridge of bare rocks endings in sheer faces at the western extremity and at the two sides. There are a few huts on the shore east of the little stream which discharges opposite Deer Island.

Fox Island is a small irregular rock covered with vegetation nearly to the water. Its shoreline is sketched but is reasonably accurate.

Fox Island Anchorage:

In the space between Deer and Fox Islands good anchorage can be found in eight to nine fathoms, soft bottom, well sheltered from wind and sea, from northeast to southeast. Between West Cape and the mouth of the stream and shacks a valley extends through to the west side of Deer Island. Bring this valley to bear S. X E. $\frac{1}{4}$ E. (Magnetic) and steer for it until Amagat Island opens south of Fox Island. Anchor here in eight to nine fathoms.

Reef:

The triangulation station of this name is on a low flat rocky islet about a mile long and somewhat narrower westward from Deer Island. It is covered with shells and soil and supports a rank growth of grass. Fourteen fathoms were found within five hundred yards of its northern side where the vessel anchored several times over sand bottom while landing triangulation parties.

Sailing Course:

The following track has been run by the Patterson when bound from Unalaska to Dolgoi Island - Pass Unga^{nm} at a distance of one nautical mile and steer N. N. E. $\frac{3}{4}$ E. to pass Fox Island at a distance of one half mile. From Fox Island steer N. E. heading for Bold Cape until Stag Point is abeam, then steer N. E. X E. $\frac{3}{4}$ E. for the northern end of Outer Iliasik. When the passage opens go through on a midchannel course steering about N. E. X N. All courses are magnetic. The least water is southward and southeastward from Thin Point where it is not advisable to get northward of the

soundings plotted on sheet 3306. A shoal spot (About five fathoms) was found east and north from Thin Point, the position of which is located only approximately.

Amagat Anchorage:

A temporary anchorage in thirteen fathoms, mud and shell bottom, good holding, was found northward of Amagat Island on the following magnetic bearings: Right tangent to rocks west from island S. S. W., Left tangent to island S. S. E. $\frac{1}{2}$ E. and left tangent to Egg Island N. W. $\frac{7}{8}$ W. This anchorage was entered from around the eastern side of Amagat.

Ikatan Peninsula:

Cape Pankof;:- The reported position of a breaker two miles E. X S. (Magnetic) from Pankof was passed over several times with the James Submarine Sehtry set at twenty fathoms and an area of two by four miles, surrounding this spot, was covered in the same way without finding anything. Heavy tide rips have been seen here during southerly weather; and it is probable that these rips gave rise to the report of a submerged rock. The rock symbol should be removed from the chart.

West Anchor Cove :- This is a safe and commodious anchorage for any kind of vessels, easy of access and departure at any time and decidedly preferable to Dora Harbor, which is too restricted by rocks for even a moderate sized vessel to swing comfortably in. West Anchor Cove is exposed to southerly weather; but with East Anchor Cove, on the other side of the Cape, safe and sheltered anchorage from any ordinary weather can be found at one or the other. The bottoms at all of these anchorages as well as at those on Sannak Island are fine dark sand in which the anchor holds well. The extensive reef reported off the eastern point of entrance does not exist beyond a comparatively narrow shelf of rocks as shown on Assistant Westdahl's sheets of the 1901 survey. The outer edge of this shelf shows up

to half tide and probably always is indicated by a breaker. Six fathoms was found about 60 meters outside the visible end of the reef with rapidly deepening water outward from there. The fifteen foot rock is inside the cove and is shown on sheet No. 3307 at \odot Box. It marks the western limits of dangers on this side but is separated from the reef by a narrow width of deep water. Inside the cove rocky ledges extend not over 300 yards from the north and from the south shores as indicated on the boat sheet. Near the head of the cove a rock column (\odot Pin) stands out prominently a short distance from the south shore marking the upper limit of the anchorage for all but small craft.

New Shoal:

A new shoal was found on line between Acherk Harbor and Amagat Island nine miles (Geographical) from the former. It is probably one eighth of a mile across inside the fifteen fathom contour and at one spot covered by four fathoms of water. Deep water, twenty-five fathoms and over, surrounds this shoal. A scant growth of kelp marks the least depth.

Lenard and Anderson Rocks:

An area surrounding the reported position of Lenard Rock was covered, as far as the hundred fathom contour, with sounding lines one and a half miles apart. While this work was in progress the sea was too smooth for breakers to occur in over three fathoms.

One line of soundings was run on each side of the indicated position of Anderson Rock, passing it at distances of from one to two miles; the exact position of both lines however are in doubt on account of imperfect fixtures. During this latter work unusually heavy swells were running that would certainly have broken in five fathoms or less and atmospheric and surface conditions were good for seeing a breaker at a distance of three or four miles.

It may be safely stated that there is no danger to navigation at either of the charted positions of these rocks; but that dangerous rocks do not exist on this bank remains to be proven. The concensus of opinion among navigators, acquainted with this region, is against any of these rocks but there are a few who believe from hearsay that they do exist somewhere in the general vicinity of those shown on our charts.

Unimak Pass:

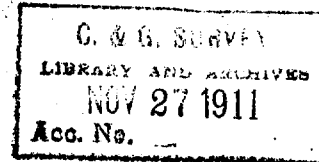
This party found the thirty fathom contour on chart No. 8860 incorrectly drawn between Scotch Cap and Middle Point. Coming from the westward the submarine sentry, set at thirty fathoms, did not trip until nearly half a mile from Unimak shore. On account of thick fog the exact position could not be determined, but the ship was in five fathoms of water and even touched three eights of a mile inside the spot from where the sentry registered thirty fathoms. A short stretch of shoreline then suddenly appeared out of the fog, close aboard. There is urgent need for a close survey of this pass especially along the Unimak shore.

Lost Harbor:

The Patterson entered and anchored here on a thick rainy night to avoid a storm vering between southeast and southwest. Anchored in twenty-six fathoms, sticky bottom, on the following magnetic bearings: Tangent to the west side of entrance W. S. W. and tangent to east side of entrance S. X W. $\frac{3}{4}$ W. (Bearings taken at daylight). Perfect shelter from wind and sea was found at the anchorage and no difficulty getting to it. Water can be boated readily from a stream discharging over a cliff on the east side.

Respectfully submitted
W. E. Parker, Asst.
Chief of Party

3305



Hyd. 3305

HYDROGRAPHY.

Alaska Peninsula

Vicinity of Dolgoi and Iliasik
Islands.

By party on the Str. PATTERSON.

W. E. Parker, Asst., C. & G. Survey.

Chief of Party.

Scale 1/40000

From June 27th to August 18,
1911.

Sounding parties in charge of:

W. E. Parker, Asst., C. & G. Survey.

R. S. Patton, Asst., C. & G. Survey.

A. R. Hunter, W. O. C. & G. Survey.

C. & G. SURVEY,
 LIBRARY AND ARCHIVES
 NOV 27 1911
 Acc. No.

Vicinity of Dolgoi Id.
3305

STATISTICS SHEET NO.

Date 1911.	Letter	Vol.	Pos.	Soundings	Miles, statute	Vessel.
June 27,	a	1	102	227	17.5	Launch
" 29,	b	1	101	283	14.7	"
" 30,	c	1	107	330	19.6	"
July 5,	d	2	101	202	18.2	"
" 7,	e	2	135	289	27.5	"
" 8,	f	2	23	48	4.5	"
" 10,	g	2	57	159	10.0	"
" 15,	h	3	58	120	12.2	"
" 17,	i	3	4	3	.1	"
" 18,	j	3	80	311	15.3	"
" 19,	k	3	100	222	21.0	"
" 21,	l	4	50	144	9.5	"
" 26,	m	4	50	157	8.2	"
" 29,	n	4	44	91	9.0	"
" 31,	o	4	18	58	3.0	"
Aug. 3,	p	4	69	206	11.5	"
" 4,	q	4	41	104	7.5	"
" 4,	q	5	82	189	15.5	"
" 6,	r	5	115	382	18.5	"
" 10,	s	5	33	279	11.2	"
" 12,	t	5	44	130	9.2	"
" 14,	u	5	30	69	5.1	"
" 14,	u	6	83	308	13.4	"
" 15,	v	6	67	273	11.2	"
" 16,	w	6	101	429	19.6	"
" 17,	x	6	39	88	5.1	"
" 17,	x	7	74	319	18.9	"
" 18,	y	7	102	420	16.0	"
" 4,	A	1	20	120	26.0	PATERSON.
" 7,	B	1	147	157	35.0	"
" 10,	C	1	64	71	16.0	"
" 12,	D	1	22	23	4.6	"
" 14,	E	1	150	166	31.0	"
" 15,	F	2	34	93	7.0	"
" 16,	G	2	124	253	39.0	"
" 17,	H	2	142	439	35.0	"
" 18,	I	2	31	37	6.0	"
" 18,	a	1	22	56	---	Whaleboat.
34	10	2666	7255	552.6		

VEC
Jan.27,1912.

HYDROGRAPHIC SHEET 3305.

Vicinity of Dolgoi Island, Alaska, by W. E. Parker
in 1911.

TIDES.

	Dolgoi Harbor ft.
Mean lower low water, or plane of reference on staff	3.2
Lowest tide observed " "	1.3
Highest " " " "	12.4
Mean range of tide	4.7

Coast and Geodetic Survey
JAN 29 1912
TIDAL DIVISION

MAR 1 1925

~~Division of Hydrography and Topography:~~

Division of Charts:

Tide reducers are approved in
1 volumes of sounding records for

HYDROGRAPHIC SHEET NO. 3305

Locality: S. W. Alaska

Chief of Party: R. F. Luce in 1925

Plane of reference is M L L W
5.7 ft. on tide staff at King Cove

For reduction of soundings, condition of records satisfactory
except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted
3. Time meridian not given at beginning of day's work.
4. Time (whether A. M. or P. M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.

No reducers entered by field party.



Chief, Division of Tides and Currents.

Hyd. Sheet # 3305

The soundings plotted are in fact and are the soundings as reduced by the Field Party,

In the "Lanuch Party" soundings corrections for tides are entered up to and including 8 fathoms but not for greater depth,

In the "Patterson Party" soundings corrections for tides are made and where the sounding tube was used a further correction is made by the use of a factor unknown to the Drawing Section, See notes bottom page 2 Vol 1,

J. D. Torrey

Verified by J. D. T.
5/20/13.

Note: Tube was suspended 4 fms. above lead. Line was inclined about 45° , hence tube was 2 fms. above bottom. Correction therefore consists of $\frac{1}{2}$ of 4 or 2 fms. for tube work. See note, Vol. 1, page 2 of H-3306

H. W. Murray 10/23/44

3305a

Hyd. 3305-2

HYDROGRAPHY

C. & G. SURVEY
LIBRARY AND ARCHIVES
NOV 27 1911
Acc. No.

Alaska Peninsula

Dolgoi Harbor

Alaska

By party on Steamer PATTERSON

W. E. Parker, Assistant, C. & G. Survey,

Chief of Party

Scale 1 - 20 000

From June 28th to August 10, 1911.

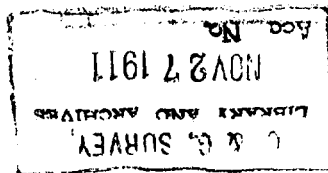
Sounding parties in charge of:

A. R. Hunter, W.O. C. & G. Survey.

3305^a

Dolgoi Harbor.

STATISTICS SHEET NO. _____



Date 1911.	Letter	Vol.	Pos.	Soundings.	Miles, statue.	Vessel.
June 28,	a	1	139	656	14.2	Launch.
July 1,	b	1	100	471	12.4	"
" 6,	c	2	52	197	5.7	"
" 12,	d	2	117	595	15.4	"
" 13,	e	2	30	149	3.0	"
" 20,	f	2	69	301	7.0	"
" 25.	g	3	38	107	4.8	"
Aug. 10,	h	3	60	189	6.6	"
			605	2665	68.7	

VEC
Jan. 27, 1912.

HYDROGRAPHIC SHEET 3305a.

Dolgoi Harbor, Alaska, by Assistant W. E. Parker
in 1911.

TIDES.

	Dolgoi Harbor ft.
Mean lower low water, or plane of reference on staff	3.2
Lowest tide observed " "	1.5
Highest " " " "	18.4
Mean range of tide	4.7

Coast and Geodetic Survey
JAN 29 1912
TIDAL DIVISION

Hyps. Sheet # 3305 a

• Verified by J. D. T. 5/16/13.

The soundings were plotted as reduced by field Party
and, on this sheet, tide corrections were made. (Not on 3305 above 8 fath.)

Soundings by tube has other correction a factor being use which
is unknown to the Drawing Section, See below

J. D. Tonney

Hyd Sheet No 3305 + 3305^a

Mar 22 1912

With the exception of a small area south of signal
Road and east of the one-foot rock the area surveyed
is well covered.

The records were kept in a satisfactory manner.

H. L. Simon

Verified, J. D. Torrey. 7/13

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

H 3305 (add'l work)

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic 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. (L) H 3305 add'l work

State . SW. Alaska

General locality . Alaska Peninsula

Locality . ~~Outer Ilisliak Islands to Dolgoi Island.~~
Vicinity Dolgoi Harbor and

Chief of party . R. F. Luce

Surveyed by . Charles Shaw and W. Weidlich

Date of survey . August 1925

Scale 1 to 20,000

Soundings in Fathoms

Plane of reference M.L.L.W.

Protracted by Soundings in pencil by

Inked by Verified by

Records accompanying sheet (check those forwarded):

1 Des. report, _____ Tide books, _____ Marigrams, 2 Boat sheets,

2 Sounding books, _____ Wire-drag books, _____ Photographs.

Data from other sources affecting sheet

Position of one-foot spot taken from sheet H 3305

Remarks: Smooth sheet has not been plotted, boat sheets only are being forwarded.

3305 (addl work)

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET "L"
ILIASIK ISLANDS TO DOLGOI ISLAND, S.W. ALASKA.

INSTRUCTIONS

Paragraph 20 of the Director's Instructions dated March 20, 1925, calls for the hydrography of the west coast of Sarana Island and of the southern part of Outer Iliasik Island. Paragraph 21 calls for the development of a reported one-foot spot in Lat. 55°04' and Long. 161°49'. The two boat sheets attached represent the execution of this work.

*Plotted on
Sheet 4491*

SIGNALS

In the work off the entrance to Dolgoi Harbor signals were located by plane table and by sextant cuts. A signal was built at the approximate location of triangulation station ENTRANCE although the mark itself was not recovered; the two reference marks, however, were found.

The signals for the Sarana and Iliasik Island work were located by the planetable; SUM and RAN having been located by triangulation.

SOUNDINGS

In the Dolgoi Island work the hand lead was used throughout; on the other boat sheet the hand sounding machine was used in depths over about ten fathoms. None of the soundings on the boat sheets have been reduced for tide.

THE REPORTED ONE-FOOT SPOT

A careful lookout was kept during the work off the entrance to Dolgoi Harbor for the one-foot spot mentioned in the instructions. Mr. Weidlich who is now attached to this field party states that he found the spot with one foot of water on it in 1911; but the present soundings did not reveal the shoal in question. Sounding lines show no indication of it in the position given on H 3305 sheet. On the larger shoal closeby to the eastward a four-fathom and two five-fathom spots were found, with rocky bottom. The passage, three quarters of a mile wide, between the shoal and Dolgoi Island shore is clear. Mr. Shaw who was in charge of the development of the one-foot spot during the present season feels that sufficient care has been taken in the work to show this spot unless it be of very very small extent. It is Mr. Weidlich's recollection that the spot was very sharp and covered a very small area. *The present survey should not be considered as disproving the existence of the 1 ft. spot, which probably exists; present survey was done only for development of area East of the shoal.*

INSHORE DANGERS

There is a sunken rock about 100 meters off signal NEL, on Dolgoi Island, that breaks with the swell.

The Iliasik boat sheet shows clearly a number of sunken rocks and shoals but particular attention is called to the point at which breakers appear in a general area of about ten fathoms depth one mile west of station SUM. A patch of kelp helps to mark the spot. Another stretch of foul coast, with many submerged rocks, extends from MIS south almost to PIL. Breakers appear nearly a half mile off of NEL. Kelp that was considered too thick to penetrate with the motorsailer extends almost continuous along the coast and is shown clearly on the boat sheet

Inspected Aug. 24+25, 1925 by RT Ruce, Comdg Officer

Date 1925.	Letter	Volume	Positions	Soundings	Miles Statute	Vessels
Aug. 25	a	2	72	208	10.5	M.S. 9843
" 22	a	1	44	76	9.6	M.S. 8171
" 24	b	1	47	136	7.8	" "
" 25	c	1	45	138	8.0	" "
			208	558	35.90	

Soundings in fathoms and feet above M.L.L.W.

An automatic tide gauge at King Cove was used for this work.

Plane of reference, reading on gauge :

Lowest tide observed, reading on gauge:

Highest tide observed, reading on gauge:

E. R.

ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY

AND REFER TO No. 11-DRM

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON May 4, 1926.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 3305 (Additional Work)

Off Dolgoi Island, Alaska Peninsula

Surveyed in 1925

Instructions dated March 20, 1925 (PIONEER)

Chief of Party, R. F. Luce.

Surveyed by C. Shaw and W. Weidlich.

Protracted and soundings plotted by R. J. Christman.

Verified and inked by H. R. Edmonston.

1. The records conform to the requirements of the General Instructions except that boats' courses were entirely omitted.
2. The plan and character of development satisfy the General Instructions except that more soundings should have been taken in the vicinity of the 4 1/2 fathom shoal and in the area between the 4 1/2 fathom shoal and the 5 1/6 fathom shoal to the northwest.
3. The extent of the survey satisfies the specific instructions. Although not called for in the specific instructions, the surveyor should have verified the existence and location of the 1 ft. spot (from H. 3305, Vol. 1, page 5, Whaleboat) lat. 55° 04', long. 161° 49'. The plotting of this spot on the new survey places it among 20 fathom soundings with no indication of any marked shoaling.
4. The sounding line crossings are adequate.
5. The information is sufficient for drawing the usual depth curves.
6. The junction with H. 3305 (1911) is satisfactory.
7. This survey is not sufficiently complete to disprove the existence of the 1 ft. spot mentioned in paragraph 3. There is some doubt, however, as to the exact location of this spot. The original records were examined (Vol. 1, page 5, Whaleboat, H. 3305) and there appear to be some impossible speeds between successive positions, such as 18 miles per hour. It was for this reason that

position 20 of the old survey was not plotted. There is a possibility that the 1 ft. spot is actually on the 5 1/6 fathom shoal where it plots by changing the right angle 10 degrees.

In view of the uncertainty regarding the correct position of the shoal it is recommended that whenever work is done again in this locality, the area in the vicinity of the 1 ft. spot should be investigated and additional lines run better to develop the entire shoal area, and, if practicable, a drag carried over the shoal.

For the present, however, the 1 ft. sounding will be retained in its charted position. (Approved L.O.C. and A.L.G.)

8. Character and scope of surveying - Good.
Drafting - Excellent.
9. Reviewed by A. L. Shalowitz, April, 1926.

ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY

AND REFER TO No.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

April 8, 1926.

REPORT ON VERIFICATION OF SUB-PLAN ON

HYDROGRAPHIC SHEET No. 3305. (Add. Work)

The sounding records were incomplete insomuch as the boats courses were omitted and there were a good many mistakes in the recording of time.

The protracting and plotting of soundings were well done.

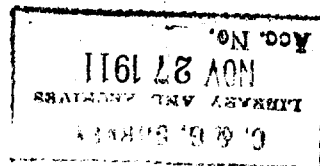
A few additional lines should have been run to develop the $4\frac{1}{2}$ fathoms spot in Lat. $55^{\circ} 04'$, Long. $161^{\circ} 48'$.

H. R. Edmonston

H. R. Edmonston,
Field Records Section.

3306

Hyd 3306



TOPOGRAPHY AND HYDROGRAPHY

Alaska Peninsula

Iliasik to Umga Islands

By party on Steamer PATTERSON

W. E. Parker, Assistant, C. & G. Survey

Chief of Party

From August 19 to Sept. 23
1911.

Scale 1 - 40 000

Hydrographic parties in charge of:

W. E. Parker, Ass't., C. & G. S.

R. S. Patton, " " " "

A. R. Hunter, W. O. " " "

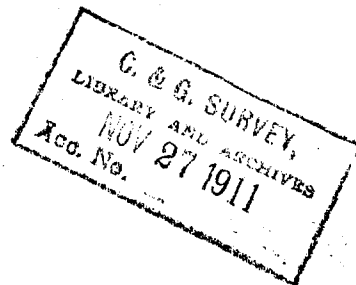
Shore line sketched from theodolite traverse by E. E. Smith, Ass't., C. & G. S.
and by sextant cuts from vessel by W.E.Parker, Ass't., C. & G. S.

Angles measured with 4" Berger theodolite

Department of Commerce and Labor

At No. 1 50 metres off shore

Δ Slope	0° 00'
Point F (Belkofski Bay)	24° 44'
⊙ Bel	77 18
Δ Inner	81 19
L. tan shore	8 44
L. " Deer I.	186 06
No. 2	211 07
Δ Outer	103 56
No. 3 (approx)	206 55

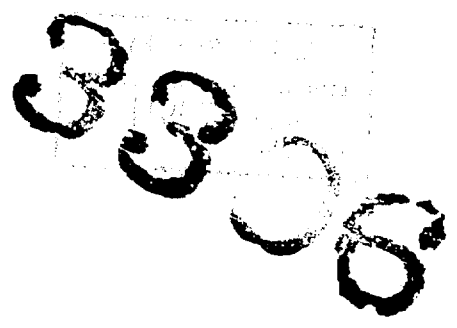
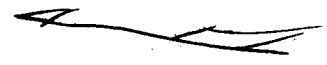
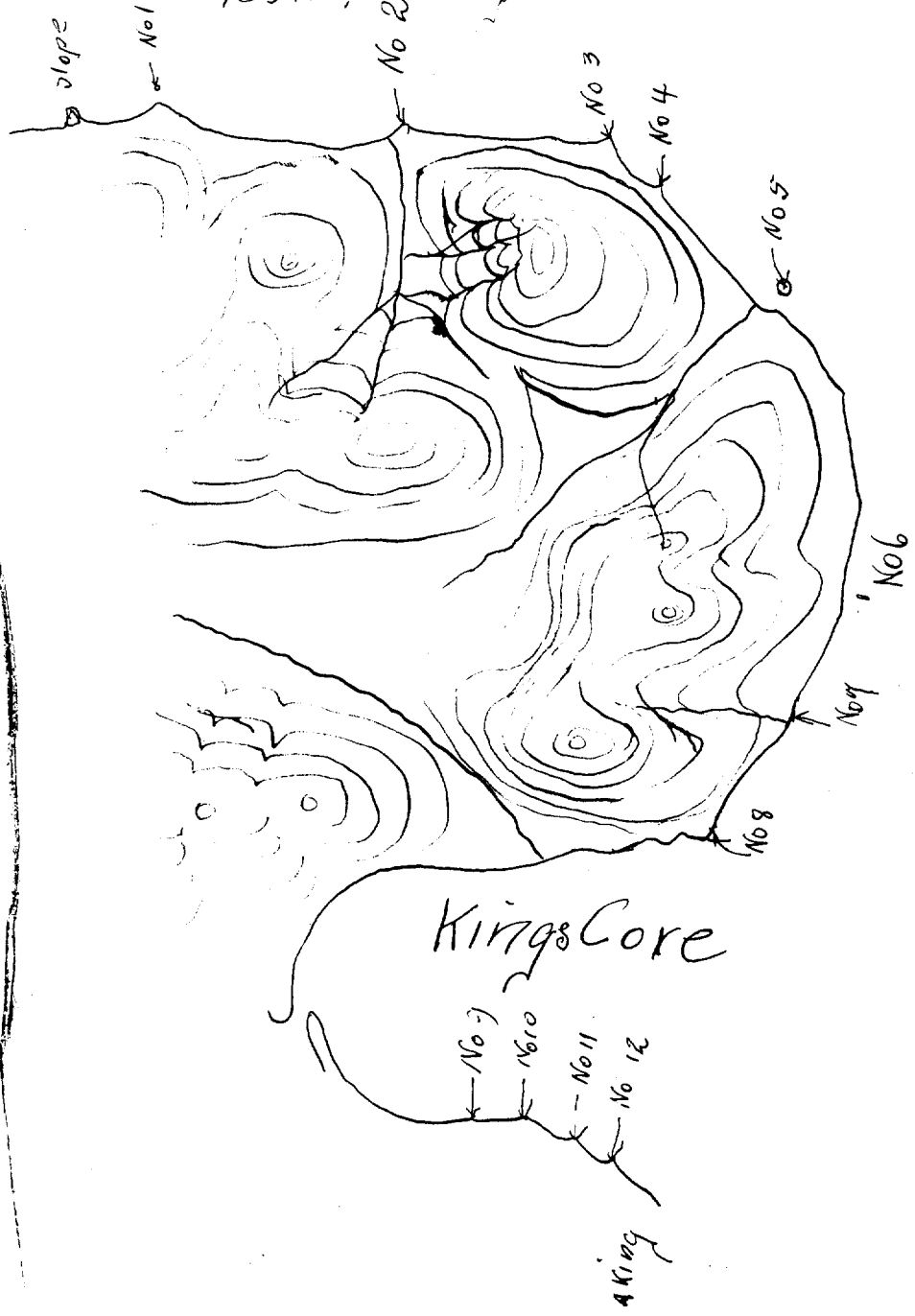


At No. 3

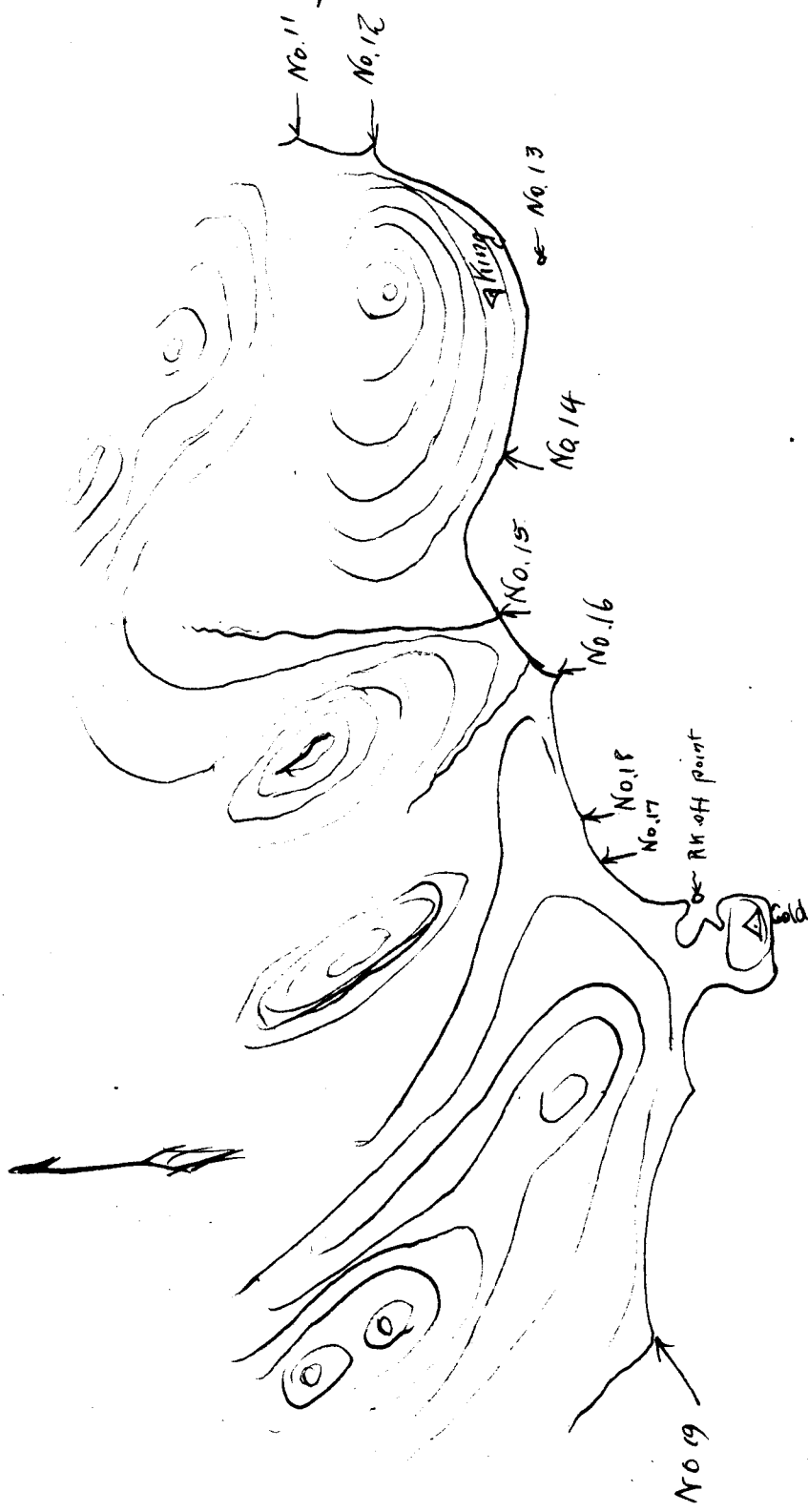
Δ Deer	0° 00'
⊙ Bel	223 21
Δ Inner	231 22
Δ Outer	254 12
No. 2	182 42
L. tan Deer I.	340 54
R. " Shore (No. 4.)	8 55

COPIES

Belkno, SKI, day



Kings Core



Cold Bay

3306

Department of Commerce and Labor
 on ledge 20 metres south of Big Took

G. & G. SURVEY,
 LIBRARY AND ARCHIVES
 NOV 27 1911
 Acc. No.

At No. 5

△ Outew	0	00
△ Deea	103	36
△ Fox	141	33
R. tan. shore (rounding point)	157	52
L. " " (No 4)	318	34
Stream	282	00
R. tan Deea I	139	39
N.E. end reef	85	07

At No. 6 on small rock 100 metres off shore.

△ Deea	0	00
△ Fox	58	50
△ old	107	13
R. tan shore (No 7)	136	00
L. " " (rounding point)	288	37
L. " distant pt. Deea I	54	22
" " near " " "	53	25
R. " " " "	349	46
L. " Fox. I.	57	16
R. " " " "	63	45
△ King	122	12
N.E. end reef	348	33

20000

Department of Commerce and Labor

At No. 8

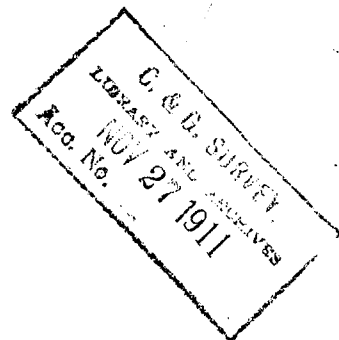
G. & G. SURVEY
LIBRARY AND MAPS
NOV 27 1911
Acc. No.

A Deer		0 00'
R. tan. near pt. Deer I		46 37
" " far " " (approx)		54 59
L " Fox I.		56 01
		57 30
A Fox		
R. tan Fox I		62 15
tan cold pt.		102 57
		103 27
A Cold		
tan. pt. near A King		106 53
Pt. " " (No. 12)		11 3 26
" " " (No. 11)		124 57
" " " (No. 10)		133 49
" " " (No. 9)		142 18
S. Gable Cannery		176 56
Smoke stack		178 00
R. tan shore		193
Along shore into light		335
L. tan " (No. 7)	}	345 52
A Rock ooo		354 56
R. tan Deer I.		20
A Deer		

3303

Department of Commerce and Labor

At. No. 12 on ledge 10 metres off shore



Δ Bold	— — — —	0	00'
Δ Deer	— — — —	37	10
Δ Fox	— — — —	98	38
R. tan. shore	— — — —	121	00
L. " "	} — — — —	274	45
South Gable Cannery			
Smoke stack (approx)	— — — —	275	12
Bold	— — — —	0	00

At. No. 13 ON ROCK 50 metres off shore

Δ Deer	— — — —	0	00
Δ Fox	— — — —	63	46
Δ Cold	— — — —	118	29
No. 14	— — — —	149	18
" 15	— — — —	147	28
" 16	— — — —	138	20
R. Tan shore	— — — —	291	00
Δ Bold	— — — —	322	11
L. tan Deer. I.	— — — —	356	57
L. " Fox. I.	— — — —	62	08
R. " " "	— — — —	69	04

3308

Department of Commerce and Labor

At. No 17

Acc. No. 1161 18 1911
 U. S. SURVEY
 LIBRARY AND ARCHIVES
 NOV 27 1911

A King	0	00
Tan. Bold Cape	13	37
L. tan Deer I.	32	43
A peew	89	45
L. tan. Fox I.	97	30
A Fox	99	25
R. tan. Fox I.	104	32
Rk. off point.	130	40
Tan. cold Point	135	32
A Cold	137	58
Along shore (westward)	148	
" " (No 18)	340	
No. 16	351	45
" 15	352	09
" 14	359	51

At A Cold

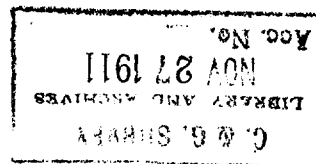
A King	0	00
L. tan Deer I	43	38
" " Fox "	104	01
R. " " "	111	52
Tan. Thin Pt.	148	40
" Pt. toward Cold Bay (No 19)	219	43
Rk. off point	337	30
No. 18	333	13
No. 15	351	00
Tan. pt. near A King	1	51
" Bold Cape	19	08

000000

3306

Eliasik Id. to Umga Id.

STATISTICS SHEET NO. _____



Date 1911.	Letter.	Vol.	Pos.	Soundings.	Miles, statute.	Vessel.
Aug. 19,	A	1	120	259	43.0	PATTERSON.
" 21,	B	1	54	121	29.5	"
Sept. 20,	C	1	90	320	36.0	"
" 23,	D	1	14	46	3.0	"
			278	746	111.5	

VEU
Jan. 27, 1912.

HYDROGRAPHIC SHEET 3306.

Vicinity of Deer I., Alaska Peninsula, Alaska, by
Asst. W. E. Parker in 1911.

TIDES.

Predicted tides were used for reduction
of soundings

Mean lower low water, or plane of reference
below mean sea level ----- 4.0 ft.

Mean rise and fall of tides ----- 6.0 "

Coast and Geodetic Survey

JAN 29 1912

TIDAL DIVISION

3307a

C. & G. SURVEY,
LIBRARY AND ARCHIVES
NOV 27 1911
Acc. No. _____

Hyd = 3307a

HYDROGRAPHY.

Alaska Peninsula.

Ikatan Peninsula.

West Anchor Cove.

By party on the Str. PATTERSON.

W.E. Parker, Asst., C. & G. Survey.

Chief of Party.

Scale 1:20,000

From September 11, to September 12,

1911.

Sounding party in charge of:

A.R. Hunter, W.O. C. & G. Survey.

Hyd. #3307^a

2.23. '12

Department of Commerce and Labor

This sheet, purporting to be on a scale of 1:20000 was reduced to one half and the reduction compared with top. # 2554.

The reduction was found to be on the scale of 1:36890, which would make the scale of hyd. 3307^a to be 1:18445 and not 1:20000.

E. J. Sommer.

3307^a

C. & G. SURVEY,
LIBRARY AND ARCHIVES
NOV 27 1911
Acc. No.

West Anchor Cove.

STATISTICS SHEET NO. _____

Date 1911.	Letter	Vol.	Pos.	Sdgs.	Miles, statue.	Vessel.
Sept. 11,	a (blue)	1	34	101	8.8	Launch.
" 12,	b "	1	125	580	23.5	"
		1	159	681	32.3	

Jan. 27, 1912.

HYDROGRAPHIC SHEET 5307.

Vicinity of Sannak Island, Alaska, by Assistant
W. E. Parker in 1911.

TIDES.

Predicted tides were used for reduction
of soundings

Mean lower low water, or plane of reference
below mean sea level ----- 4.0 ft.

Mean rise and fall of tides ----- 6.0 "

Coast and Geodetic Survey

JAN 29 1912

TIDAL INVERSION.

VEC
Jan. 27, 1912

HYDROGRAPHIC SHEET 3307a.

West Anchor Cove, Unimak Island, Alaska, by
Asst. W. E. Parker in 1911.

TIDES.

Predicted tides were used for reduction
of soundings.

Mean lower low water, or plane of reference below mean sea level -----	4.0 ft.
Mean rise and fall of tides -----	6.0 "

Coast and Geodetic Survey
JAN 29 1912
KIDAL DIVISION

Hyd Sheet No 3307^a

Mar 20 1912

With the exception of a small area north west of O Box the development is probably sufficient.

As some of the signals used in locating the positions from 21 to 220^a fall outside the limits of the sheet, these positions were plotted on Hyd^o 2556, transferred to this sheet and made to agree as far as possible with the notes given in the sounding records. Three two of the three signals appear on this sheet the locus of the one angle was used. ~~in~~ ~~the~~ ~~locus~~ locating the positions transferred from the other sheet.

H. L. Simmons

3305 adv. wks 1925 applied to Plan of Dolgori Hbr. (ch 8851) 4/15/1944 J.W.