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 No. A

REGISTER NO. T-6693

State SOUTHWEST ALASKA

General locality Kodiak Island

Locality Southwest End Of English Bay

Scale 1:5,000 Date of survey June - July, 1939

Vessel DISCOVERER

Chief of party G. C. Jones

Surveyed by H. A. Paton

Inked by H. A. Paton

Heights in feet above MHW to ground to top of treads

Contour Approximate Contour Form line interval 10 feet

Instructions dated January 25, 1939

Remarks:
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 No. B

REGISTER NO. T-6694 T6694

State SOUTHWEST ALASKA

General locality KODIAK ISLAND

Locality NORTHWEST PART OF ENGLISH BAY

Scale 1:5,000 Date of survey June - July, 1939

Vessel DISCOVERER

Chief of party G. O. Jones

Surveyed by H. A. Paton

Inked by H. A. Paton

Heights in feet above mean to ground Contour, Approximate Contour, Form line interval 10. feet

Instructions dated January 25, 1939

Remarks: ____________________________
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 No. C

REGISTER NO. T-6695

State OF SOUTHWEST ALASKA

General locality KOOLIK ISLAND

Locality WOMENS LAGOON AND NYMAN PENINSULA

Scale 1:5,000 Date of survey June - July, 1939

Vessel DISCOVERER

Chief of party G. C. Jones

Surveyed by H. A. Paton

Inked by H. A. Paton

Heights in feet above Mean Lower Water Datum, Form line interval 10 feet

Contour Approximate Contours

Instructions dated January 25, 1939

Remarks: SEE SURVEYS BY U. S. NAVY FOR AREA

LEFT BLANK.
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 No. D

REGISTER NO. T-6696

State

SOUTHWEST ALASKA

General locality

KODIAK ISLAND

Locality

ST. PAULIA, HARBOR AND BUSHIIN RIVER

Scale 1:10,000

Date of survey June - July, 1939

Vessel DISCOVERER

Chief of party G. C. Jones

Surveyed by H. A. Paton

Inked by H. A. Paton

Heights in feet above MHW to ground tops of trees

Contour, approximate contour. Form line interval 20 feet

Instructions dated January 25, 1939

Remarks: SEE SURVEYS BY U. S. NAVY FOR AREAS LEFT BLANK.
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........R........T6697

REGISTER NO. T-6697

State..........................SOUTHWEST ALASKA

General locality........KODIAK ISLAND

Locality......................ENGELSH BAY AND CLIFF POINT

Scale........1:10,000........Date of survey........June - July, 1939

Vessel.......................DISCOVERER

Chief of party..............G. C. Jones

Surveyed by...............H. A. Paton

Inked by.....................H. A. Paton

Heights in feet above Mean High to ground to tops of trees

Contours at approximate intervals, Form line interval 20 feet

Instructions dated........January 25, 1939

Remarks:...........................

.................................
RESTRICTED

DESCRIPTION REPORT
TO ACCOMPANY

SHEET A, REGISTER NO. T-6693, SOUTHWEST END OF ENGLISH BAY
SHEET B, REGISTER NO. T-6694, NORTHWEST PART OF ENGLISH BAY
SHEET C, REGISTER NO. T-6695, WOMENS LAGOON AND NYMAN PENINSULA
SHEET D, REGISTER NO. T-6696, ST. PAUL'S HARBOUR AND BUSKIN RIVER
SHEET E, REGISTER NO. T-6697, ENGLISH BAY AND CLIFF POINT

KODIAK ISLAND
SOUTHWEST ALASKA
OCTOBER 24, 1939

INSTRUCTIONS

The work on the above sheets was done in accordance with instructions dated January 25, 1939, Project HT-229.

LIMITS

Sheet A, Scale 1: 5,000, extends across the southwest end of English Bay from Triangulation Station CHRIS to Cape Frye. It joins Sheet B on the north, and Sheet E on the east.

Sheet B, Scale 1: 5,000, extends along the northwest side of English Bay and Women's Lagoon from Cape Frye to Triangulation Station SHANNON. It joins Sheet C on the northeast.

Sheet C, Scale 1: 5,000, covers the remaining portion of Women's Lagoon, all of Nyman Peninsula, and the northwest side of the en-
trance into English Bay to Triangulation Station ABBERT. It joins Sheet D on the north.

Sheet D, Scale 1: 10,000, covers St. Paul's Harbor and the Buskin River valley, between Triangulation Stations GIB and ABBERT. It also includes Puffin Island, and the rocky reef north of the southeast entrance into St. Paul's Harbor.

CONTEMPORARY SURVEYS

In 1938 and 1939, the U. S. Navy executed detailed surveys over part of the area covered by these sheets. See blue prints forwarded with these sheets for the work they accomplished in 1938. Similar prints for their work in 1939 can probably be obtained in due time from the Navy Department if desired. The Navy surveys were made on a scale of 1: 2,400, using a five foot contour interval above the storm high water line and a one foot interval below that line cut to the Mean Lower Low Line. They placed a value of 100 on the M. L. L. W. Line, and all contours are elevations above this datum. For control, their point of origin for their plane coordinate system was placed at our Triangulation Station CHINIAK S. W. BASE, 1907. This point was given the values of 15000 North, and 5000 East. They remeasured our 1907 Base Line between this station and CHINIAK N. E. BASE, three times, getting various results. It is believed they used a steel tape and made no corrections for temperature. They finally accepted our published values for the length as being sufficiently accurate for their work. They also accepted our azimuth of the base for their plane coordinate system. In 1938 they made no attempt to use the other triangulation stations in this vicinity for additional control, although they recovered them. Their reason for not using them was that they did not wish to convert the geographic positions into plane coordinates.
They did establish a system of triangulation, using a transit to measure the angles and secured triangle closures of as much as three minutes. Some of the C. & G. S. stations were incorporated in their scheme. For additional horizontal control they ran numerous tape and transit traverses, getting, they claimed, very good closures. Vertical control was obtained from three C. & G. S. tidal bench marks established on the south end of Zaimka Island (formerly High Island) in 1933. To carry these elevations to Nyman Peninsula it was necessary to make a shot across English Bay, about 0.8 mile. Contours were obtained by both transit-stadia and plane table methods. In 1939, the Navy did make use of some of our triangulation stations for the control of their traverses, plotting these stations graphically by means of distances and azimuths from some known points. They surveyed a narrow area extending southwest from Shannon Point down to Cape Frye. This area had been covered by this party previously on a scale of 1: 5000 and, the results of their work are not available as yet, as no comparison between the two surveys can be made.

SCOPE OF WORK

Because of the detailed surveys executed by the Navy, it was decided that it would be a waste of time, effort, and Government funds to duplicate all of their work. However, it was necessary to locate hydrographic signals for the control of our hydrographic surveys. By the time these signals had been located, little additional work was necessary to complete a survey of the high and low water lines. On the Navy Sheets, the shoreline is "Storm High Water Line" or "Grass Line", and in general is about eleven feet above M. L. L. W. On the five sheets surveyed by this party, the shore line is MEAN HIGH WATER, which is 7.8 feet above M. L. L. W. The low water line on our sheets is the
outer limit of the area bare at whatever stage of tide prevailing at
at the time the survey was being made. A special effort was made to
get all important parts of this low water area at minus stages of the
tide. This in some cases was two feet below M. L. L. W. Notes will
be found inked on Sheets A and B showing the stage of tide when the
low water line was located. It is quite certain that no rocks swash
at M. L. L. W. were missed on any of these sheets, as all of the area
was viewed at least at some stage of minus tide.

The elevation of all rocks and reefs were referred to M. L.-
L. W. as the datum plane and a careful effort was made to correct for
the stage of tide. (See "METHODS")

The form lines shown on Sheets C and D are planned to sup-
plement the work of the Navy and in only a few places do they overlap
into their work. On Sheet B there will be found a duplication with
their work in 1939, but this was done after our survey and their plans
were not known at the time. The extent of our surveys were limited by
a line shown on a chart which we received from our Washington Office.
In a few places this limit was exceeded, but this was done after con-
sultation with Lieutenant G. K. Brody, Officer-in-Charge of Naval Sur-
vey Party, and in accordance with his verbal request. In a few other
places, the limit as laid down by our office was not reached. In all
of these places, the area was of no importance to the Navy, and to
have completed the survey would have involved more time than was avail-
able.

CONTROL

The control for all sheets was adequate. Nine stations were
recovered and seven new stations were established. Two of the recovered
stations, ORAB and NOME, showed signs of having been disturbed by frost
action, so they were remarked in exactly the position in which they were found. No attempt was made to recover a more accurate location of their original position by straightening up the marks. The positions of these new marks were determined with third order accuracy, and they differ slightly from the old positions. However, the names of the stations were not changed.

Only one old station, HIGH, could not be recovered, as it had been marked by a wooden stake only. Under normal surveying conditions the old stations would have been sufficient control, but due to the establishment of the Naval Air Base here, the need for a more accurate survey was realized. With the new stations, all sheets had four or more stations on them. Stations were established at the (of junction) junction points of all sheets, so there was no question at the shoreline. (See ABBERT, CHRIS, CRAB, and SHANNON)

There were no triangulation stations up the Buskin River valley (Sheet D), but a very strong scheme of graphic triangulation was established. The system was first laid out and signals erected to increase the accuracy of the system. On Sheet A, traverses were extended up the several streams. These were generally tied in to a plane table position on the foothills located by a three point problem. All errors were negligible, and no adjustments were necessary.

**METHODS**

The usual methods as described in the Topographic Manual were used for the survey of these sheets. Nearly all signals were located by cuts from triangulation stations or supplemental stations located by graphic triangulation. In a few cases, a signal had only two cuts, but the intersection was checked by a rod reading from a nearby set-up. No long traverses were needed to locate any part of
the shore line, and no adjustments were necessary.

The datum plane for the formlines was mean high water. To obtain the height of the instrument, a tide curve was constructed each day from the values given in the tide tables. These curves were believed to be accurate to within one-half foot. The Navy established three tide staffs in various parts of this area, and our curve could be checked on these staffs frequently. At no time did the staff readings differ from the predicted tide curve by more than one-half foot.

To determine the height of the instrument, a reading was taken on a rod held in the water. Since there was little wave action in these protected waters, the H. I. could be determined very accurately. The elevation of all rocks outside of the high water line was determined carefully by means of a vertical angle and a stadia distance scaled from the sheet. This method was found to be much more accurate than trying to estimate the height by means of the appearance of the moss on the rocks. It was found that the moss line on the rocks did not always indicate the high water line.

The high water line in this area is 7.8 feet above M. L. L. W., which value was furnished by the Washington Office with the tidal data for the bench marks on Zaimka Island. The topographer on the previous survey in 1933, probably used Mean Higher High Water for his shoreline instead of Mean High Water. This probably accounts for much of the discrepancies between the two surveys.

The following system of signals were used by the topographic party:

<table>
<thead>
<tr>
<th>Signal by Instrument Man</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand (or object) held to the right</td>
<td>Rodman move to the right</td>
</tr>
<tr>
<td>&quot; &quot; &quot; &quot; &quot; &quot; left</td>
<td>&quot; &quot; &quot; &quot; &quot; left</td>
</tr>
<tr>
<td>&quot; &quot; &quot; &quot; vertically</td>
<td>Give rod reading</td>
</tr>
</tbody>
</table>
Hand (or object) waved on his right
" " " " " left
" " " " vertically
" " " " overhead
Both hands waved
" " moved down
Hand vertical, then leaning right or left
Person turning around
Combination of fourth and seventh signal

### Signal by Rodman

- Rod leaning 45°
- Hand waved horizontally
- " vertically
- Top of rod waving

### Meaning

- Important object to be located
- Distance, ten meters
- " one meter
- This is a turning point

The progress of the party in locating formlines was greatly expedited by the fortunate assignment of three seamen to this party, all of whom could be trained to use the Hypsograph. In order to determine the decimal place for the vertical height, the following rule-of-thumb method was used:

An angle of one minute subtends about one foot in a distance of 1000 meters. By use of this rule, errors such as calling the answers five feet instead of 0.5 feet were prevented.

The elevations for the control of formlines were determined by two methods—intersection of cuts from distance set-ups, and by stadia traverses up into the hills. On Sheet D, the latter method was used on all the hills near the beach and up the Buskin River Valley. Above the 300 foot formline, the slopes of Barometer Mountain were determined by intersected points. On Sheet C, the entire northeast portion was located by traverses and the lower reaches of the remaining portions. On Sheet B, traverses were run up to about the 400 foot form line. The layout of this sheet was unfavorable for the locations of points by the intersection method. Set-ups along the foot of Old Women's Mountain did not see very far up the slope. The undergrowth of alders and grass was
so dense that traversing was very difficult. Set-ups could be made at Stations CRAB and FOX, but these stations were quite far apart, and it was hard to identify points from both stations. On Sheet A, all elevations were determined by rod readings. On Sheet E, the intersection method was used for nearly all the points located in the area southwest of Station TRAP. Set-ups could be made on Mary Island, and Nyman Peninsula, so this method worked very nicely. In the area between Stations TRAP and ENGLISH, both methods were used. To the east of Station ENGLISH, nearly all points were located by traverses. (On Sheet D, between Devils Creek and CHINIAK S. W. BASE, all points were determined by rod readings except the ones above 1000 feet.) No formlines were located on Zaimka Island, nor on Nyman Peninsula and the area between the peninsula and the Buskin River. In these areas the Navy had located very accurate contours (five foot interval), and it would have been inexpedient to have put formlines in these areas.

On all the 1:5000 sheets the formline interval used was ten feet. On the other two sheets the interval was twenty feet. The number of elevations determined was greatly increased wherever possible in order to obtain form lines of more than usual accuracy.

**GENERAL DESCRIPTION**

Beginning at the northern limit of the work in Sheet D, the coast is bordered by rocky cliffs for a distance of about one mile. They vary in height up to 100 feet. The cliffs are interrupted by five draws leading west and between these draws are found hills from two to three hundred feet in height covered with spruce, alder, willow, and grass. These hills extend from one quarter to one half mile back from the coast, and then the ground slopes down to a series of small hills, lakes, and swampy flats. Along the north edge of Sheet D, the ground
rises to the 1150 foot ridge, the southwest extension of Pillar Mountain behind the town of Kodiak. There are no large streams leading down to the shore in this section, most of the drainage being to the west into Katelnikoff Lake and thence through Lake Louise into the Buskin River.

The Buskin River flows into St. Paul Harbor from the west through a broad flat meadow, one half mile wide at the coast. About a half mile back from the shore, the valley is broken up into rolling foothills with small meadows between. The river flows through a water-gap between two of these hills about 0.8 mile back from the beach. The flat east of this pair of hills is covered with brush down to the highway, and with grass on down to the beach. This grass is mowed and stored as hay by the local rancher. Several small stands of cottonwood and willow are found in this area. About three miles up the river is found the Buskin Lake, about one mile long and 3/4 mile wide. There are several meadows along the river up toward the lake which once produced hay, but they are not being farmed at present. Formerly a good wagon road extended up to the lake on the south side of the river. This has been washed out in places and inundated in others by beaver lakes. Some of the foothills are covered with grass, and others have dense clumps of alders and other brush on them. A few scattered spruce are found.

South of the Buskin River flats are found a confused jumble of low rolling foothills, about 100 feet high covered with grass and alder. These hills terminate at the coast in a series of short rocky cliffs, with lower draws between. The beach in this section is composed of rock under the cliffs and sand in front of the draws. A series of dangerous rock reefs parallel the coast at a distance up to 600 meters from shore. They evidently mark a fault which strikes northeasterly
toward Gibson Cove. Farther inland the land rises to Old Womens Mountain and Barometer Mountain. Old Womens Mountain is a smooth ridge extending to the southwest, and about 1400 feet in height. It is covered with grass over most of its area. The remaining portion has a dense growth of salmon berry bushes and alder brush.

Northwest of Old Womens Mountain is found a sharp peak, Barometer Mountain, 2468 feet in height. On its northeast face it has a dense growth of alder and other brush up to a height of about 1500 feet. Grass grows up the rest of the slope until the top is reached, which is bare.

About 1-1/2 miles east of the mouth of the Buskin River is found Puffin Island, about 80 feet in height. It has rock cliffs on all sides except for a short section on the north side. This island serves as a part of the series of rocks and reefs that constitute the eastern breakwater for St. Pauls Harbor.

Beginning at Lat. 57° 44', Long. 152° 30', Nyman Peninsula extends one and 1/3 miles to the southwest, separating Womens Lagoon from English Bay. Its terrain is another series of low rolling hills covered with grass and scattered clumps of cottonwood, willow, alder and spruce. The stand of spruce is increasing in this section, there being many small trees a foot or so tall. A small lake is found in the southeast portion of the peninsula. A long, narrow sand spit, known as Nyman Spit makes out in a southeasterly direction from the end of the peninsula for a distance of 1100 meters. To clear the end of the spit, hold to a range formed by the left tangents of Zaimka and Blodgett Islands.

Lying between Nyman Peninsula and the northeast end of Old Womens Mountain is Womens Lagoon. The northeast end of the lagoon has a large area which dries at low tide. A graded road has been cut into
the side of Old Womens Mountain down to Bell's Ranch. During the last winter, small earth slides made this road impassable for wheeled traffic. A crude trail has been made along the high water line, which is used by cars and trucks, but in places this is impassable at high tide. During the summer of 1939, the Alaskan Road Commission reopened the upper, graded road, and placed some gravel on its surface.

The southwest end of English Bay consists of extensive tidal flats up to 1-1/4 miles wide, interrupted by Cape Frye, Cape Bruhn, and Mary Island. Cape Frye is a 50-foot grass-covered ridge extending about 1/2 mile in a NE'LY and SW'LY direction and connected to the meadows to the west of it by a narrow grassy neck, 70 meters wide. Cape Bruhn is a similar ridge, 30 feet high and 1/2 mile long. Mary Island is a continuation of the same ridge which forms Cape Bruhn. It is 54 feet high, and about 0.9 mile long. The northernmost point appears to be a separate island, 43 feet high, but this is connected to the larger portion by a rocky neck about one or two feet above high water. There is a pinnacle rock, 11 feet high, about 300 meters east of the island, which is connected at low water to the rest of the island by a low sand spit. A rocky reef, one foot above high water, is found about 300 meters northeast of the northeast tip of the island.

At low water, the area between Cape Bruhn and Mary Island is bare. It is a broad sand-and-shell flat. The extreme low water line curves northwesterly from the southwest end of Mary Island to the southwest corner of Cape Frye. This large sand flat is covered with a network of shallow streams, the many outlets of Russian, Sargent, Paranimoff and Salonie Creeks. The major part of the outflow from Salonie Creek is found in a channel close to the southwest corner of Mary Island. This stream has a depth of 2 feet at M. L. L. W. Most of the
other streams on the flat have depths of only one foot.

For a distance of 1-1/4 miles west from Cape Bruhn, the shore-
line has a definite berm, grass-covered. From this point northward to
Cape Frye the terrain has such an even rise that there is no definite
shoreline. The shore is bordered by a low grassy meadow, marshy in
places, crossed by numerous streams, the branching outlets of the four
large streams mentioned previously. These streams vary in depth with
the seasons, but in June and July of 1939 they could be forded with
hip boots in only a few places. The grassy meadow is a favorite graz-
ing place for the local ranchers. Seward Old brought 120 head of cat-
tle over the Kalsin Bay Trail to graze in this section during the summer
months of 1939. Behind these meadows is found a dense growth of cotton-
wood, alder, willow, and other deciduous trees. Many beaver dams are
found in among these trees, converting the areas into swamps and leav-
ing a stand of dead trees in the lakes themselves.

Between Paranamoff and Salonie Creeks is found a long ridge
which rises to Kashevaroff Mountain, 2255' high. Going back up Sargent
and Russian Creeks, low foot hills are reached about a mile from shore,
two of which are shown on Sheet A. Behind these hills are found a ser-
ies of higher hills which lead back to the 2000 foot ridge behind.
Paranamoff Creek heads up to a beaver lake and is more of a tidal es-
tuary than the other streams. The other three creeks have swift currents
and large outflows.

Southeast of English Bay is a long ridge about 200 feet in
height, a spur of the 2300 foot Heightman Mountain. This ridge is known
as Zaimka Ridge. It is cut up into many small hills and draws which do
not, however, destroy the general outline of the ridge. It is covered
with grass and scattered clumps of alder with some stands of spruce.
A similar ridge parallels it on the southeast which ends in Cliff Point. Woch Creek flows through the narrow valley between these two ridges. A third ridge probably paralleled it on the northwest side during some geological age but is now partly submerged and is evidenced only by Blodgett Island, the headland on which Triangulation Station ENGLISH is located, Zaimka and Cliff Islands. Blodgett Island is connected with the mainland at low tide with a sandy isthmus. Zaimka Island is covered with bushes and grass, is about 155 feet high and is bordered with cliffs along most of its perimeter. The southern point is a separate hill 60 feet in height. A low grassy divide lies between the two hills.

Cliff Island is a small 62 foot island with steep cliffs on all but the southeast side. There is a 35 foot pinnacle rock on the northeast side and a 30 foot one on the south side. (See Page 16 — Comparison with Previous Surveys) In the vicinity of Zaimka and Cliff Islands and around Cliff Point are found numerous and extensive rocky reefs varying in height from "awash at extreme low tide" to heights of 6 feet above high water. There are two prominent pinnacle rocks on the reefs under Cliff Point, 23 and 15 feet high respectively. There are good landing places on the southeast sides of Zaimka and Cliff Islands. Another is found on the mainland due south of Cliff Island and there is a narrow opening through the reef in to a short sand beach due north of Triangulation Station CLIFF POINT.

Over the entire area covered by these five sheets there is considerable evidence of the shower of volcanic ash from Mount Katmai, which covered Kodiak Island in 1912. In most places it is now covered with vegetation, but occasional white spots can still be seen. Under all the sod will be found a 12" layer of white sand, wherever one may dig. All the white sand found along the beaches is the result of the ash shower.
All rocks in this area are grey whacky, a local name for a slate-like formation. This term is found in Geological Survey publications. It is surprising to find one type of rock in the entire area. The erosion of this rock produces a black sand which is found on many of the beaches in this area. All the beaches would be black sand if it were not for the volcanic ash.

**COMPARISON WITH PREVIOUS SURVEYS**

T-4845, surveyed by H. B. Campbell in 1933. Compared with Sheet D.

In Lat. 57°46.1', Long. 152°27.7', the old survey shows a single long rock, 12 feet in height. A set-up was made on this reef, and it was found to consist of 6 small rocks surrounded by a rocky reef. This highest point is 15 feet above M. H. W.

The island on which Station GIB is located was found to be slightly in error as to shape. There are several rocks, close in, which had not been shown as being separate from the island.

In Lat. 57°46.15', Long. 152°27.87', the old survey shows a signal "SUM" on a rock about 10 meters offshore. It was found that the ground behind this rock is above M. H. W., so the present survey shows this as a small point instead of a detached rock.

In Lat. 57°45.8', Long. 152°28.4', the 1933 survey failed to show a rock awash which had been located in 1907. This rock falls within the limits of a rocky reef which extends 100 meters off shore. A detached rock, which bares 3 feet at M. L. L. W. was found 80 meters northeast of the 1907 location. There are numerous places where the character of the beach was found to differ from the 1933 survey. In general, there should have been more rocky reefs shown.

A small pond in Lat. 57°45.7', Long. 152°28.85', was carefully
located with four rod readings. The location shown on the 1933 surveys is in error. There is no surface drainage to the sea.

In Lat. 57°45.4', Long. 152°28.46', a rock awash at M. L. L. W. was verified. The new position is about 28 meters west of the 1933 position. This area was surveyed when the tide was about one foot. The table was set up on the 4 foot rock about 250 meters to the northeast. Two men were sent over to the kelp patch in a skiff and they held the rod on the highest point they could find on the submerged reef, which was about one foot under the surface of the water at that time.

Another rock awash at M. L. L. W. was found in Lat. 57°45.47', Long. 152°28.38', which had not been shown previously. Both of these rocks are marked by kelp patches.

In Lat. 57°45.17', 152°29.5', the 1933 survey showed 5 rocks awash, bare 4 feet at M. L. L. W. This reef was visited at a minus tide and was found to consist of three reefs and four rocks, varying in height from 2 to 7 feet above M. L. L. W.

In Lat. 57°45.04', Long. 152°28.39', the 1907 survey showed a rock awash which was not verified by the 1933 survey. This vicinity was visited at a -2 foot tide. Only one rock was found which bares 2 feet at M. L. L. W. It plots about 70 meters north by east of the old position.

In Lat. 57°45.3', Long. 152°26.1', the previous surveys showed four rocks awash, bare 4 feet at M. L. L. W. This area was surveyed at a minus tide, and was found to consist of a rocky reef which bares 7 ft. at M. L. L. W. and two smaller rocks close by.

The height of Puffin Island was carefully determined by rod readings and found to be 80 feet instead of 82 feet as shown on the previous survey.
In Lat. 57°45.2', Long. 152°28.1', the previous survey showed three rocks awash. These now fall within the limits of the rocky reef east of Puffin Island. Several additional rocks and reefs in this vicinity were located that had not been shown previously.

In Lat. 57°44.86', Long. 152°29.33', the previous surveys showed two buildings. At present there is only one building.

In Lat. 57°44.3', Long. 152°28.7', there were found two large reefs and one sunken rock between them, instead of the four rocks awash as shown on the previous survey.

In Lat. 57°44.72', Long. 152°29.02', a rock previously shown as 8 feet in height was found to be in error. A rod reading was taken on this rock and the height was determined to be only 5 feet above M.H.W.

The plane table was set up on the reef in Lat. 57°44.3', Long. 152°26.1', and all rocks in the vicinity were located by rod readings. The tide was at a minus stage at the time. The highest point on the reef was found to be 7 feet instead of three.

Sheet T-4845 compared with Sheet E.

In the area north of Cliff Point around Cliff and Zaimka Isds., all rocks and reefs were verified with the following exceptions: Lat. 57°43.85', Long. 152°27.54', a rock awash shown on the 1933 survey could not be found. The site was visited at a minus 2 foot tide, and only a kelp patch could be seen. The pinnacle rock just south of Cliff Island was shown on the 1933 surveys as being 31 feet high. On Chart No. 8545 this height was erroneously shown as only 3 feet. The rock was determined to be 30 feet by the 1939 survey. The height of several rocks was changed by small amounts and several additional rocks were located. This entire area was surveyed on minus tides.

In Lat. 57°43.75', Long. 152°28.1', the 1933 survey shows one
rock awash. This rock now falls within the limits of the rocky reef which extends 70 meters to the east from Zainke Island. This vicinity was visited at a -1½ foot tide, and two rocks awash were located outside of the edge of the reef.

In Lat. 57°43.3', Long. 152°27.0', a small lake or pond was located by means of four rod readings. The elevation of the lake surface in July, 1939, was 19 feet above M. H. W. The lake is shallow, about 1½ feet deep. It has no surface drainage to the sea as shown on the 1933 survey. A second lake, 150 meters northwest of the first, marked "intermittent" on the 1933 surveys, was visited several times during the summer of 1939, and only a grassy marsh or meadow was seen. It is recommended that the marsh symbol be used in this area instead of a lake.

The height of Zainke Island is 62 feet instead of 60, and Triangulation Station CLIFF POINT is 189 feet instead of 210. All these heights were checked by several vertical angles.

T-4846, Scale 1: 20,000, surveyed by H. B. Campbell in 1933,
Compared With Sheet E, 1939

Lat. 57°43.3', Long. 152°29.05', a rock that "bears 8 feet at M. L. L. W." now falls within the limits of the rocky reef that extends out from the shore. Its height was determined to be 6½ feet above M. L. L. W.

The height of Bladgett Island was found to be 70 feet instead of 73 feet as shown on the 1933 survey. The rock awash southwest of the island is 8.8 feet above M. L. L. W. so it is shown as a rock, elevation 1 foot above M. H. W.

Triangulation Station TRAP is 74 feet high instead of 40 feet.
T-4846 Compared With Sheet A, 1939

The shoreline on the northeast end of Mary Island does not check very closely with the previous surveys. Probably this portion was sketched from a distant set-up on the 20,000 sheet. The shoreline around the southwest end of English Bay is very indefinite and changeable. The streams probably change each spring.

T-4846 Compared With Sheet C, 1939

Lat. 57°43.53', Long. 152°30.6', the previous survey shows a rock, 9 feet in height. This is probably an error as there are no rocks more than one foot in height in this vicinity.

In Lat. 57°44.25', Long. 152°29.5', two rocks awash were shown on the 1933 surveys. A penciled note on the print furnished by the office requested "Verify or Disprove". This area was visited at a -2 ft. tide. Two large rocky reefs were found, extending out from shore, which are awash at M. H. W. There are no isolated rocks outside of the low water line along this section of the shore.

H-5440, Scale 1: 20,000, surveyed by H. B. Campbell in 1933.

Compared with Sheet C, 1939

In Lat. 57°43.4', Long. 152°30.6', the hydrographic surveys show a rock awash, "bears 6 feet". This location falls in the center of a broad sand-and-shell spit which has a general elevation of only two feet at M. L. L. W. The topographic party rodded in the limits of the spit at a -3/4 foot tide and there were no rocks visible. It is recommended therefore, that this symbol be removed from the charts.

GEOGRAPHIC NAMES

The Geographic Names were obtained from the following sources:

Symbol Source

Charts of the U. S. Coast and Geodetic Survey

c T. A. Shannon, homesteader on Women's Lagoon. Has lived in Alaska for 40 or more years.

d E. E. Bell, homesteader in the southwest corner of English Bay. Has lived there only about 2 years.

e Harry Lander, Kodiak, Alaska. Has lived there 16 years.

f Tom Nelson, present lessee of the Abbert Ranch. Has lived there 3 years.

g Peter Tripetsin, Kodiak, Alaska. Inhabitant of Kodiak 54 yrs.

h W. J. Erskine, a leading citizen of Kodiak for 32 years.

i Ben Kraft, prominent merchant in Kodiak. Has lived there all of his life.

j Fred Sargent, 63 years old, has lived in Kodiak all of his life. His wife is a native-born Russian. He and his wife were my best source of information for Russian and Aleut names.

k Alf Amadesen, hunting guide, born and raised in Kodiak.

l Emil C. Christofersen, born and raised in Kodiak. His hunting cabin is in the southeast corner of English Bay.


n Alaska Road Commission.

o Knut Thevik, long time inhabitant of Gibson Cove.


r Names of early settlers of Kodiak applied by the survey party to geographic features for which there were no local names in use. Some of these names do not fall on any of the five sheets.
See copy of Chart No. 8535 for their location.

ABERT HIGHWAY. Sources c, e, f, h, i, j, l, n. The graded road from Kodiak to the Buskin River. Source "h" claimed that this was a part of a proposed highway which would eventually extend around the entire Kodiak Island, and for which the name "Shelikof Highway" had been proposed. Another section of this highway has been built from Kodiak to Mill Bay, which is known as the Mill Bay Road. However, the Alaska Road Commission has given the section from Kodiak to the Buskin River the name of Abbert Highway, which is shown by a road sign at the bridge over the Buskin River. South of the bridge the name Seward Old Highway is generally used for the road. The large ranch extending along both sides of the Buskin River back from the beach to the Buskin Lake is known as the Abbert Ranch. Mr. Abbert, the present owner, lives in Boston, Mass. Tom Nelson is leasing the ranch from Abbert and lives in a small house west of the silo.

BAROMETER MOUNTAIN. Sources—-all in agreement. The 2483 ft. mountain about two miles west of the mouth of the Buskin River. Source "j" said the old Russian name was Shamanka, which means "doctor's Thermometer". Probably when this was translated into English, the term was misunderstood, and it became "barometer" instead.

BLOGGETT ISLAND. Source "r". The small island in English Bay on the southeast side near the entrance, about one mile southwest of Zaimka Island.

BUSKIN LAKE. The large lake at the head of the Buskin River. This lake formerly had the same names as the river--Spaskovi and Puskian, but only Buskin is in common use at the present time. Source "l" called it "Big Lake".

BUSKIN RIVER. Sources a, b, c, i, l. The old Russian name
for this stream was Sapaskovi River (source j) and source "g" claimed
the name was formerly Puskian River. However, the term Buskin is the
only one in common use at the present time. Source "q" gives the name
Zapozhkova, which means "Little Boot". At the time Capt. Finney was
living near it, the stream was called Ranch Creek.

CAPE BRUHN. Source "r". The short cape southwest of Mary
Island. The flat grassy meadows between Capes Frye and Bruhn were once
known as the Frye-Bruhn Ranch.

CAPE FRYE. Source "r". The small elbow-shaped cape on the
west side of English Bay. See above.

CLIFF ISLAND. Sources "a" and "h". The small grass covered
island, 60 feet high, northwest of Cliff Point. The name is not in
very common use, as most of the people interviewed had no name for the
island. Source "q" gave the Russian name Utesist, which means "Cliffy".
Source "l" called it Sea Gull Island.

CLIFF POINT. Sources "a" and "h". The end of the peninsula
separating English Bay and Middle Bay. Sources "j" and "l" said the
old Aleut name for the point was Abanakina Mis, but this name is not in
common use. Source "q" gave the old Russian name of Utesof, which
means Cliff.

COPE MOUNTAIN. Source "r". The 2444 foot mountain one mile
southwest of Erskine Mountain.

DEVILS CREEK. Sources b, c, i, j, l. The tributary of the
Buskin River that rises between Barometer Mountain and Old Womens
Mountain. Source "g" said the name used to be Zapakowa River, but this
is not in common use. Source "j" said the Russians called it Chortova
Rechka, which translated into English is Devils Creek.

ENGLISH BAY. Sources c, g, h, i, l. The water area extending
from Lat. 57°44', Long. 152°29', to Lat. 57°43.2', Long. 152°32.1',
and south and west of these two points. This area is shown as Womens Bay on sources "a" and "p". However, the old Russian name for it was Aglitskoii Bay (Source j), which means English Bay. The Russians gave it that name because of their belief that the famous English explorer Captain Cook, stopped there on one of his voyages. All the inhabitants in Kodiak refer to it as English Bay, but they will generally add, "But it is shown as Womens Bay on the Charts". They all seemed to be in favor of retaining the name "English Bay". Mr. W. J. Erskine has had some correspondence with the National Geographic Board regarding names in this area, and he has suggested that the bay be given the name "Gerstle Bay" to honor one of the well known families who helped settle Alaska in the early days. However, the name, English Bay, is in such common use and has been established for so many years, it is not believed advisable to attempt to make a change. Source "b" refers to this locality as the Womens Bay Area, and calls English Bay the "Outer Bay" and Womens Lagoon as "The Inner Bay".

ERSKINE MOUNTAIN. Source "r". The 2563 foot mountain southwest of Barometer Mountain and northwest of the southwest end of Old Womens Mountain. Captain Erskine was in command of a sailing ship that entered Kodiak Harbor in 1868, and was a well known mariner in this vicinity for many years. His son is a leading citizen of Kodiak to this day.

FINNEY BEACH. Sources e, f, g, i, k, l. The sandy beach at the northeast end of Nyman Spit. Name derived from a Captain Finney who was the original squatter on the present Abbert Ranch. It is said he panned gold from the sands of this beach which is the reason the local inhabitants have applied his name to it. Source "h" thought the name should be applied to the beach near the mouth of the Buskin River
and source "d" thought it referred to the sand flats at the head of Womens Lagoon. These two sources were considered to be in error.

FISHER LAKE. Source "r". The small lake northwest of Lake Louise. Not shown on Sheet D, but the approximate location is indicated by the name lettered on the sheet. The outlet from Fisher Lake into Lake Louise is shown.

GIBSON COVE. Source "a". The small cove just north of the limits of Sheet D. Many different forms of this name is in use. Near Gibson Harbor, East Gibson Bay, etc. Since it is a very small bight, the term Cove is more descriptive. The additional term of Near or East is used to distinguish it from the small bight southwest of it where Triangulation Station GIB is located. However, there was no general agreement on a name for this latter place, so a distinguishing adjective for Gibson Cove is not needed. The Old Russian names were Winter Harbor (source "q"), and Kristovski (source "j"). No change is recommended.

HEIGHTMAN MOUNTAIN. Source "r". The 2326 foot mountain between English and Middle Bays.

KALSN BAY TRAIL. Source "n". A trail beginning at the end of the Seward Old Highway at Bell's Ranch and extending across the tidal flats at the end of English Bay to the southeast corner of the bay, and thence leading over Zaimka Ridge to Middle Bay. It is not known if the trail has been extended to Kalsin Bay yet or not. Source "n" claimed the term should be applied to the highway south of the Buskin River also, however, this section of the road is generally called the Seward Old Highway. The section of the trail from Bell's Ranch to Christoffersen's cabin has not been constructed, but has been traversed occasionally by vehicles at low tide by making use of the tidal flats. The trail beginning at Christoffersen's place is suitable for foot traffic only
and was constructed recently by Indian labor as a relief measure. For this reason it is commonly known as the "Indian Road" (source "1"). An amusing side light on this was the number of local inhabitants who had previously denied having any Indian blood, suddenly became full-fledged Indians in order to qualify for work on the relief project. Although the name "Indian Road" is in quite common use, it is considered best to recommend the official name for the trail.

KASHEVAROFF MOUNTAIN. Source "r". The 2255 foot mountain southwest of English Bay between Russian and Salonie Creeks. There is no local name in use for this mountain, so the name is suggested by the survey party to honor a former Priest of the Russian Greek Church of Kodiak.

KATELNIKOFF BEACH. The small beach at the end of a draw leading back to Katelnikoff Lake. Source "j" claimed the old Russian name was Katelnikoffski Lida, which can be translated into Katelnikoff's Beach. The old form is not recommended.

KATELNIKOFF LAKE. Sources "j" and others. The smaller and the northeasterly one of two lakes passed by the Abbert Highway. One source claimed the name should be Little Womens Lake, but all other sources disclaimed this. Some referred to it as First Lake, because it is the first passed after leaving Kodiak.

LAKE LOUISE. Source "h". The first lake north of the Buskin River, passed by the Abbert Highway. Most of the local inhabitants have no name for this lake. One claimed it was called Womens Lake, but this was disputed by nearly all other sources. One source claimed it should be called Katelnikoff Lake, but several other sources claimed the smaller lake to the northeast was the proper one to apply this name. Some sources used the term Second Lake, because it was the second one passed on the
Abbert Highway after leaving Kodiak.

MARY ISLAND. Sources "g" and "l". The island in the southern part of English Bay. Sources j and i called Mary's Island. The name is derived from a Mary Shuravloff, who lived on the island many years ago. The island is now uninhabited, and it is not known if Mary Shuravloff is still living or not.

NYMAN PENINSULA. The long peninsula lying between English Bay and Womens Lagoon. There used to be a fish saltery at the end of the peninsula, owned by a man named Gus Nyman. This was many years ago, and most of the local inhabitants have no knowledge of it. Their name is generally "the Peninsula". Source "j" claimed the Russians called it "the Reef".

NYMAN SPIT. Sources "j" and "l". The long sand spit making out to the southeast from the end of Nyman Peninsula.

OLD WOMENS CREEK. The smaller creek that flows around the southwest end of Old Womens Mountain and joins Sargent Creek. There is no local name in use for this stream, so Old Womens Creek is suggested by the survey party. Since the possessive "s" form is used for the mountain, the same form is recommended for the creek.

OLD WOMENS MOUNTAIN. Sources "b", "h", and "i". The long ridge running northeast and southwest along the northwest side of Womens Lagoon and English Bay. Various reasons are given for the application of this name. The Russians called it Babia, which means Woman. (Sources "j", "h", and "m".) Source "d" claimed that the Aleuts gave it the name Old Women because they hid their wives there when they feared attacks from hostile tribes. Others claimed that the Aleut women used to go down to this vicinity to catch and dry fish. Because it was remote from their village, the young girls did not like to go down there, so only the old
women want down. However, the mountain has two small points on top, and when viewed from the northeast they resemble a woman's breasts, which may have suggested the term to the Russians. Sources "e", "f", "g", and "l", called it Womens Mountain. The possessive ending is the most common form in use, and it is recommended the "s" be shown.

PARANAMOFF CREEK. Source "r". The small stream that empties into the southwest corner of English Bay just west of the ridge that makes down from Kashevaroff Mountain.

PAVLOFF MOUNTAIN. Source "r". The 2550 foot mountain at the southwest end of the valley drained by Salonie Creek. Pavloff was the manager of the Russian-American Fur Co. in Kodiak in 1868.

PUFFIN ISLAND. The island about 1½ miles east of the mouth of the Buskin River. All sources are in agreement on this name. Source "i" said the old Russian name was Maltsoff Island. He said it was once known as Garden Island, and he showed me an old land grant on which this term was used.

PYRAMID MOUNTAIN. The very sharp peak north of Buskin Lake. Source "i" called this Sharp Mountain. Source "l" called it Devils Peak, but this name should not be used because of the presence of the Devils Prongs, the name shown on our charts for the triple peak behind Kodiak. However, many of the local inhabitants call this triple mountain the Three Sisters, and if the name Devils Prongs were not applied to them, the term Devils Peak might be used for Pyramid Mountain. The term Pyramid Mountain is used by some of the local inhabitants, and it is quite descriptive for the mountain. No change is recommended.

RUSSIAN CREEK. Sources "c", "e", "f", and "g". The large stream, with several mouths, which empties into the southwest corner of English Bay, to the east of Sargent Creek. Source "d" thought the
name should be applied to Salonie Creek, but this was considered to be an error. Many of the local inhabitants have no name for the stream. Source "j" said the old name was Kashagak Creek, which means Russian Creek, when translated into English. It is not certain if this name is of Aleut origin or not.

ST. PAULS HARBOR. The water area extending from Cliff Point to Near Island, sheltered from the sea by a series of shoals and Puffin Island. All sources were in agreement on this name.

SALONIE CREEK. The large creek that flows into English Bay east of Triangulation Station RUSSIAN. Source "j" said the old Russian name for this stream was Salonie Rechka, which means Salt Creek. Source "d" said the stream was Russian River, but all other sources disputed this. Bell has been in this locality only 2 years, so his information was considered to be in error. Many people interviewed had no name for the stream, especially Christoffersen, who has a hunting cabin near the stream. Source "j" said there used to be a fish saltery at the mouth of the stream, which accounted for the name applied. The stream could be called Salt Creek, but this name is not very distinctive, so the form Salonie is recommended.

SARGENT CREEK. Source "r". One of the two large streams that empty into the southwest corner of English Bay. It is northwest of Russian Creek and rises south and west of Cope Mountain. It has several large tributaries, one of which is Old Womans Creek. There is no local name in use for this stream, and the name is suggested by the survey party to honor an early settler of Kodiak, Fred Sargent, who settled there in 1868 and died in 1911. His son is at present the jailer of Kodiak.
SEWARD OLD HIGHWAY. Sources "b", "c", "d", "e", and "f". The graded road from Buskin River to the Bell Ranch. Seward Old is still living, but the name is in common use. He used to live on the Bell Ranch, but now has a home over in Kalsin Bay. Nearly all of the local inhabitants call Sid Olds, and their name for the highway is therefore Sid Olds Highway. However, the correct form of his name is recommended.

SHANNON POINT. The point on the northwest side of Womens Lagoon near the entrance from English Bay. The name was first used by the Navy survey party and local inhabitants in 1939 after T. A. Shannon homesteaded on the point. He built a house there and lived there part of the time.

WOCHNE CREEK. Source "r". The small stream on the southeast side of Zaimka Ridge, which empties into the passage opposite Zaimka Island.

WOMENS LAGOON. Sources "d" and "l". The water area northwest of Nyman Peninsula. It is shown as part of Womens Bay on Chart No. 8545. This bay is very shallow at its head, about a third of it bares at Spring low tides. Source "e" said it was sometimes called Back Bay. The Russians called it Zaleff (source "j") which means Lagoon in English. Source "b" uses the term Lagoon to refer to the tidal flats at the northeast end. Sources "c" and "h" called it Old Womens Lagoon. Source "i" called it English Bay Lagoon. (See also English Bay). The possessive form is recommended, as it is more commonly used.

ZAIMKA ISLAND. Sources "h", "j", "k", "l", and "l". The large island on the southeast side of the entrance into English Bay. Sources "a" and "b" gave its name as High Island, but as the former name was established first, and is in more common use, it is recommended
the name be changed on our charts to Zaimka Island. Source "m" gave
the name of Viesokoe, a Russian word meaning High. This name appears
on our charts for the island about one mile south of Cliff Point.

ZAIMKA RIDGE. Sources "j" and "l". The ridge along the south-
east side of English Bay.

WEATHER

For a complete discussion of the normal weather conditions
for this area, see Geological Survey Bulletin No. 660-C, pages 121 and
122. During the 1939 field season, May to August, the weather was un-
usually good. The previous summer had been quite different, according
to the Navy survey party. They claim that there was rain on all but
three days during the summer period. In 1939 conditions were much dif-
ferent. There were several periods of fine weather when no rain fell,
lasting for five days or more. During July some of the smaller streams
disappeared entirely, and Devils Creek was so reduced in size that it
could be waded easily.

According to E. E. Bell and others, the williwaws are not very
bad in this area, and are found only in the area south of the south end
of Nyman Peninsula. During 1939, there were no williwaws, but in 1938
there were several occasions when ships had difficulty in anchoring in
this area. At the same time seaplanes at anchor in the upper part of
Womens Lagoon felt no wind at all.

The fog in this area will hamper air traffic at times. The
valley drained by Salonie Creek is especially bad for holding fog longer
than the other valleys. However, it is generally conceded by all in-
habitants that this vicinity has the best weather conditions of all
Southwest Alaska. The Navy survey party has kept very complete weather
records for two summers, and the Weather Bureau has had an observer
in Kodiak for forty years. Our observations during three months of only one year will not augment materially the results of their observations.

Ice forms in the southwest portion of English Bay occasionally. Local inhabitants say that some winters will be entirely free of ice and then again there will be a thin scum of slush ice in the early morning, which is broken up by wave action in a few hours. Seward Old claims that he has seen solid ice extending from Cape Frye to Nyman Peninsula on two occasions during the period of forty years that he has lived in this vicinity. The mountains in this vicinity had snow down to the water line in May, and it did not disappear entirely till late in July.

MISCELLANEOUS

The five buoys in St. Pauls Harbor, together with the temporary can marking the rock found by this ship, were located by the topographer. However, in July, 1939, the Lighthouse Service removed all of these buoys and placed some in new positions. These new locations were determined by the hydrographic survey and the topographic location of the old positions on Sheet D should be disregarded.

At present, it is planned to forward these five sheets to the office in advance of the hydrographic sheets. There may be found a few slight discrepancies in the height of rocks and reefs when the two surveys are compared. In such cases it is recommended that the topographic information be given the preference as its information could be determined more accurately.

LANDING SITES

The Navy survey party has made a thorough investigation of all possible landing sites over a wide area around Kodiak, and no
information obtained by this party would supplement the information they have accumulated. Lieutenant Brody, in charge of the Navy survey party, was personally in favor of establishing the Navy Air Base in the south end of the bay, but his recommendations were not approved, it is believed. I am inclined to agree with Lieutenant Brody in favoring this area, and I would suggest that it be given more consideration before the final decision is made. The area southwest of English Bay in the vicinity of Sargent and Russian Creeks would be a good site for hangars, houses for personnel, etc. The southeast side of Cape Frye would be an excellent place to install a dock for deep draft vessels. There is at present a moderate growth of cottonwood over some of this area, but as a rule it is well drained and level. It may be subject to more wind and fog, but it is believed that this is not sufficient reason for rejecting the site.

STATISTICS

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APPROVED AND FORWARDED:

Respectfully Submitted,

[Signature]

Hubert A. Paton
Lieutenant, C. & G. S.,
Ship DISCOVERER.

Geo. L. Bean,
Lieutenant, C. & G. S.,
Commanding DISCOVERER.
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by Ethe on 3/17/40
MEMORANDUM
IMMEDIATE ATTENTION

SURVEY DESCRIPTIVE REPORT
PHOTOSTAT OF

\[
\begin{align*}
\text{No. H} & \quad T6697 \\
\text{No. T} & \quad T6696 \\
\text{T6693} & \\
\text{T6694} & \\
\end{align*}
\]

\{ received March 14, 1940 \\
\{ registered March 15, 1940 \\
\{ verified \\
\{ reviewed \\
\{ approved \\

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

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RETURN TO

\[ \sqrt{\text{82 T. B. Reed}} \]
DIVISION OF CHARTS
Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEYS NOS. 6693 to 6697 inc. (1939)
FIELD NO. A to E

Southwest Alaska, Kodiak Island, St. Paul Harbor
and Womens Bay.
Surveyed in June - July 1939, Scale 1:5,000 and 1:10,000
Instructions dated January 25, 1939 (DISCOVERER)
Plane Table Surveys Aluminum Mounted

Chief of Party - G. C. Jones.
Surveyed and inked by - H. A. Paton.
Reviewed by - J. A. McCormick, April 15, 1940.
Inspected by - H. R. Edmonston.

1. Junctions.

The five subject surveys join each other very well
and are in satisfactory agreement with older surveys
at the eastern limits of the new work.

2. Comparison with Prior Surveys.

a. T-2137 (1867), 1:40,000.

This is a reconnaissance survey showing only
general outlines in the area covered by the new
surveys. It is superseded by the latter in the
common area.

b. T-2840 (1907) 1:20,000.

This is a fairly well executed survey covering
all of the area included in the 1939 project.
Agreement with the new surveys is fair, most of
the features on the latter being shown on T-2840,
but in lesser detail and lower accuracy of posi-
tion which is probably due in most part to the
smaller scale of the old survey. The 1939 surveys
supersede T-2840 in the common area.

c. T-4844 (1933) 1:20,000; T-4845 (1933), 1:10,000;
   T-4846 (1933) 1:20,000.

T-4844 shows only form lines in the area covered
by the new surveys. The elevation of Barometer
Mountain is exactly the same on T-4844 and T-6696
but form lines on the slope of the mountain are
in poor agreement because the older form lining
is based entirely on the single elevation of the peak. Considerable adjustment will be necessary in charting this feature. Shoreline on T-4845 and T-4846 is in fair to good agreement with that on the new surveys. Differences are mostly minor and are undoubtedly due to the smaller scale of the old surveys. Principal differences are discussed in the descriptive report, pages 14 to 18, and none are considered important enough to merit further discussion here. Form lines on T-4845 and T-4846 are at 100 foot intervals as compared with 10 and 20 foot intervals on the new surveys. Agreement between the two is reasonably fair. The new surveys supersede those of 1935 in the common area.

3. **Comparison with Chart 8545 (New Print of June 20, 1938).**

Within the area of the 1939 surveys, charted topography is from surveys discussed in the foregoing paragraphs. Blank areas in the 1939 form lining in the vicinity of the naval reservation southeast of Barometer Mountain and on High Island in lat. 57°43.6', long. 152°26.3' on T-6697 were covered by detailed U. S. Navy surveys executed in 1938 and shown on blue prints 31718 to 31721, inclusive. It should be noted that 108 ft. must be subtracted from the Navy elevations to reduce them to the plane of mean high water.

4. **Condition of Survey.**

The field drafting is excellent and the descriptive report is exceptionally comprehensive.

5. **Compliance with Instructions for the Project.**

Satisfactory.

6. **Additional Field Work Recommended.**

None.

7. **Superseded Surveys.**

T-2137 in part
T-2840 in part
T-4844 in part

T-4845 in part
T-4846 in part

Examined and approved:

T. B. Reed,  
Chief, Section of Field Records.

Chief, Division of Charts.

Raymond L. Lane,  
Chief, Section of Field Work.

Chief, Division of H. & T.