U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey

Topographic

Graphic Control

T-6931 a G. C.

Field No. SU-A-44

Office No. 6931 b

Su-P44

LOCALITY

State: Alaska—Aleutian Islands

General locality: Semichi Islands

Locality: Shemya I. to Nizki I.

1944

CHIEF OF PARTY

C. D. Meaney

SURVEYOR
LIBRARY & ARCHIVES

DATE: Feb. 2, 1945
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.

REGISTER NO. T-6931a Graphic Control

State ............................................................. Alaska - Aleutian Islands
General locality .................................................. Semichi Islands
Locality ......................................................... Shemya Island - East End
Scale ......................................................... 1:10,000
Date of survey .................................................. June - Sept., 1944
Vessel ......................................................... SURVEYOR
Chief of party .................................................. C. D. Meaney
Surveyed by .................................................... J. O. Boss and V. R. Sobiersalski
Inked by ........................................................ J. O. Boss and V. R. Sobiersalski
Heights in feet above to ground to tops of trees
Contour, Approximate contour, Form line interval feet
Instructions dated Feb. 1, 1944 (Director's Suppl.), 1944
May 17, 1944 (Liaison Officer)
Remarks: ........................................................ Graphic Control sheet; overlaps T-6932.
Descriptive Report  

to Accompany  

Graphic Control Sheets, Nos. 6931a and 6932  

Shemya Island - Aleutian Islands  

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Instructions: The survey was made in compliance with Supplemental Instructions from the Director, dated February 1, 1944, Project CS-R19, and with instructions from Lieut. Comdr. C. M. Durbin, Liaison Officer, dated May 17, 1944, Project 2.  

Limits: The area covered by the survey consists of Shemya Island, the easternmost island of the Semichi Group. The area lies between latitude 52° 42' and 52° 45' N and longitude 174° 02' and 174° 11' E.  

The survey of Shemya Island was made on two aluminum mounted topographic sheets (Nos. 6931a and 6932) on a scale of 1:10,000. The small islands in the pass were surveyed on a scale of 1:5,000 on sheet 6931b, which is the reverse side of 6931a. A separate report covers sheet 6931b.  

Survey Methods: As some air photographs of the Semichi Islands existed, and as additional photographs were to be made, the survey was limited to the location of identifiable points for the control of photographs, the location of signals to control hydrography, and the delineation of such shorelines as could be accomplished without a great expenditure of time. Most of the hydrographic signals used in the year 1943 were recovered and located, and additional signals were located. One exception is signal BLACK, which was blasted out by construction workers before it could be identified and located. A list showing 1943 signals recovered and not recovered is attached to this report.  

Adequate control existed in the form of third order triangulation executed in 1943-44 by the U. S. Engineers. Practically all objects were located by graphic triangulation, using standard planable equipment, and no traverses of any appreciable length were necessary. A considerable number of traverse stations of the U. S. Engineers were located. These were marks of a standard type, consisting of U. S. Engineers bronze disks set in concrete posts, about 9 inches square and projecting about a foot above ground, having designation and year of establishment stamped on the disk. Some of the traverse was run by Army personnel and some by personnel of private contractors. It is not known by what method or with what order of accuracy the traverse was accomplished.  

The air photographs in the possession of the SURVEYOR at the time of the survey were not very clear and were on a scale of about 1:20,000. Several sets of excellent photographs were taken later by the Army and the Navy and placed at the disposal of the SURVEYOR, but, unfortunately, these pictures were received too late in the season to permit proper field inspection and
sketching of shoreline. However, the photographs taken after July, 1944, have the advantage that many of the signals, especially white washes and tripods, are readily identifiable on the pictures. Many white washes, triangulation stations, and other points, such as corners of buildings, docks, gables, road intersection, etc., have been pricked and marked on the photographs.

Description of Coast: The shoreline of Shemya Island is very irregular, especially on the north and on the east sides. The high water line is irregular and is fringed by very irregular rocky ledges, reefs, and rocks, awash. Some of the higher parts of the rocky ledge remain above M.H.W. The shoreline has also undergone -- and is still undergoing at the present time -- artificial changes as the result of construction work. A road is being built along the entire shoreline of the island, and the construction of the breakwaters in Alcan Cove has necessitated much blasting and removal of rock from various points on the shore. From the northern and eastern shoreline, the land slopes rapidly upward to elevations of 250 to 100 feet to a well defined edge or ridge, then slopes gradually downward to sea level at the south shore of the island. The surface of the island is covered with characteristic Aleutian tundra and moss.

The south shore of the island is, on the whole, less irregular at the high water line than the north shore. However, there are many rocky ledges and scattered rocks awash.

Construction of public works and military installations was in progress while the survey was being made, and as a result, there was considerable change in objects located. Some objects would disappear soon after being located, while new objects would appear elsewhere. The various sets of photographs taken at different times, show such changes.

The mean high water line was located on the sheets for part of the south shore. It is shown between signals SCOOT and AGS (where the low water line is also shown), near signals GUS, MAT, LOW, FUP, and TALL. The shoreline east of SAN 2 is sandy and flat and it is difficult to determine the M.H.W. line merely by its appearance without knowledge of the height of the tide at a given time.

On the north shore, the only mean high water line located is in a bight west of signal KON (on sheet 6932) and on the rocks by triangulation stations GIM and BOB (on sheet 6931a). Road construction on the north shore made changes in the shoreline, but the latest photographs probably show the shore as it will remain.

The breakwaters at Alcan Harbor were not completed at the time of the survey. Construction work was still in progress and changes as the result of stormy weather were still taking place. Even the latest photographs do not show the east breakwater completed.
Air Photographs: The following is a resume of the various sets of photographs pertaining to the survey of the Semichi Islands:

<table>
<thead>
<tr>
<th>Date of Flight</th>
<th>Approx. Scale</th>
<th>No. of Photos</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-22-43</td>
<td>20,000</td>
<td>31</td>
<td>Semichi Islands</td>
</tr>
<tr>
<td>9-25-44</td>
<td>5,000</td>
<td>1- 28</td>
<td>Alaid I. only.</td>
</tr>
<tr>
<td>8-19-44</td>
<td>8,500</td>
<td>1- 18</td>
<td>Shemya &amp; Hiski Is.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Three sets, vertical, right, and left.</td>
</tr>
<tr>
<td>8-19-44</td>
<td>7,500</td>
<td>1- 61</td>
<td></td>
</tr>
<tr>
<td>9-19-44</td>
<td>10,500</td>
<td>1- 45</td>
<td></td>
</tr>
<tr>
<td>10-19-44</td>
<td>8,000</td>
<td>1- 65</td>
<td></td>
</tr>
<tr>
<td>10- 4-44</td>
<td>8,500</td>
<td>flight</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>line 1 (1-32)</td>
<td>Semichi Islands by</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 (1-35)</td>
<td>Navy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 (1-7 )</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 (1-29)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 (1-10)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 (1-23)</td>
<td></td>
</tr>
</tbody>
</table>

Junction with Other Surveys: Sheets 6931a and 6932 make a junction with each other and 6931a joins 6931b (scale 1:5,000). There is no discrepancy in junction with any of the sheets.

Geographic Names: Aside of such well established names as Pacific Ocean, Bering Sea, and Shemya Island, the only geographic names to be considered are as follows:

Alcan Harbor - The height in the northwestern part of Shemya Island was originally named "Alcan Cove" by the U. S. Army. This name appears at the present time on C. & G. S. chart No. 9125. Since the construction of the breakwaters, docks, and other harbor facilities, the cove or harbor is almost invariably called "Alcan Harbor" by all personnel on the island. It is recommended that the name "Alcan Harbor" be adopted.

Scoots Island - This is a small island on the south shore of Shemya Island near its western end. There is no very logical origin for the name, but the name seems to have become fairly well established.

Fox Beach - This is the name of a small beach near the southeast end of Shemya Island. The name was assigned by the Army and now appears on C. & G. S. chart No. 9125. The beach was designated as Beach F, "Fox" being the phonetic code word for F.
Statistics:

Area (square statute miles), sheets 6931a and 6932 22.9

Shoreline, statute miles 1.8

Roads, breakwaters, docks 2.2

Miscellaneous:

Most of the plantable work was done by Lieut. Comdr. J. C. Bose. However, some of it, especially, along the east shore of Shemya Island, was done by Lieut. V. H. Sobieralski.

The five mooring buoys south of Skoote Island (station GAS) are of the type known as net buoys.

Respectfully submitted,

J. C. Bose
Lieut. Comdr. C. & G.S.

Approved and Forwarded:

C. D. Meany
Comdg. Officer,
U.S.C. & G.S. SURVEYOR
<table>
<thead>
<tr>
<th>Name</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABE</td>
<td>Old w.w. recovered</td>
</tr>
<tr>
<td>BET</td>
<td>Old w.w. recovered</td>
</tr>
<tr>
<td>FOX</td>
<td>Old w.w. recovered</td>
</tr>
<tr>
<td>OUT</td>
<td>Old w.w. recovered</td>
</tr>
<tr>
<td>TEN</td>
<td>Old banner recovered</td>
</tr>
<tr>
<td>TRI*</td>
<td>Located by hydrographic cuts, Sheet H-6938</td>
</tr>
<tr>
<td></td>
<td>Removed before topographic location obtained</td>
</tr>
<tr>
<td>ROCK</td>
<td>Only prominent rock awash in vicinity; undoubtedly same rock as used in 1943</td>
</tr>
<tr>
<td>PUP</td>
<td>Old banner recovered</td>
</tr>
<tr>
<td>CON</td>
<td>Same tower as 1943</td>
</tr>
<tr>
<td>NED</td>
<td>Old w.w. recovered</td>
</tr>
<tr>
<td>LOW</td>
<td>Old w.w. recovered</td>
</tr>
<tr>
<td>MAT</td>
<td>Old banner recovered</td>
</tr>
<tr>
<td>BAG</td>
<td>Old w.w. recovered</td>
</tr>
<tr>
<td>ACE</td>
<td>Old w.w. recovered</td>
</tr>
<tr>
<td>GOR</td>
<td>Old tripod recovered</td>
</tr>
<tr>
<td>SCOOT</td>
<td>Skoote I. radio mast</td>
</tr>
<tr>
<td>MASTER</td>
<td>Harbormaster Tower - U.S.N.</td>
</tr>
<tr>
<td>POLE</td>
<td>Apparently same as flagpole - N.A.A.S.</td>
</tr>
<tr>
<td>LIT</td>
<td>Re-whitewashed by EXPLORER, 1944, apparently same as used in 1943</td>
</tr>
<tr>
<td>LIE</td>
<td>Highest part of reef</td>
</tr>
<tr>
<td></td>
<td>Located by triangulation, 1944</td>
</tr>
<tr>
<td>BOLO</td>
<td></td>
</tr>
<tr>
<td>JOE</td>
<td>Located by triangulation, 1944</td>
</tr>
</tbody>
</table>
DATUM

There is a small difference of approximately 11 meters between the coordinates of triangulation stations determined in the field and those later computed. In the later computations a more accurate determination of azimuth and length and also of the position of the initial station SHIPIYA were used than was available to the field party.

The latitude and longitude of the reference station as recomputed is shown on the sheet in pencil. Also shown is the recomputed datum mark.

All hydrographic sheets submitted in 1944 with the exception of H-6967, which has been forwarded to Washington, are based on the recomputed datum. The hydrographic base sheets submitted by the SURVEYING are on the field datum. Those submitted by the EXPLORER with the exception of H-6967 are on the recomputed datum.

The following is a brief resume of triangulation in the Near Islands as used for control on hydrographic and topographic sheets.

The triangulation in the vicinity of Massacre Bay, by Scaife in 1945, started from an assumed datum. Scaife's work was extended north by Sylar, USNR, to make a recovery of the Navy's astronomical station of 1934, which was near station CHIC. Assuming the position of station CHIC to be the same as the astronomical station, the following datum differences were obtained:

<table>
<thead>
<tr>
<th>Scaife's datum CHIC 1943</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>52° 56' 18.5318 N</td>
<td>173° 14' 27.740 E</td>
</tr>
<tr>
<td>USN Observation Pier 1934</td>
<td>52° 55' 49.25</td>
<td>173° 14' 24.55</td>
</tr>
</tbody>
</table>

Correction from Scaife and Sylar, 1945, to USN 1934 -------------------
-30.069
-03.360

Note: The astronomical pier is five or six feet from CHIC and is exactly on the line towards RM 1945. The pier was too large for Sylar to occupy with his instrument without leaning against the pier, which set in tundra and moved under pressure. Hence the new station. See Sylar's description for distances between them. This difference has been ignored and CHIC assumed to be a recovery of the astronomical station.

When plotting the 1945 smooth sheets, the difference shown above was applied to all of Scaife's and Sylar's geographic positions to bring the sheets on the USN 1934 datum.
In 1944 when the party on the SURVEYOR took up work in the Semichi Islands, the coordinates of stations SHENYA and ALAID as determined were used in their triangulation computations. To reconcile the azimuths of these positions could be used on Form 27 "Position Computation", an inverse computation was made. Starting with the position of SHENYA as determined, and using the azimuth of the line SHENYA-ALAID as determined by the inverse computation and the length of the line SHENYA-SAN 2 as furnished by the Resident Army Engineer, the positions of triangulation stations in the Semichi Islands were computed. The positions of triangulation stations on this topographic sheet were so determined.

Later in the season, the triangulation executed by Seafe and Sylar was recomputed by Lt. Cmdr. Shelton on the EXPLORER, starting with the astronomical position of station CHIC as determined by the Navy in 1934 [USN GAMHT 1934 datum]. This data was not available to the party on the SURVEYOR at the time work was commenced. The recomputed values of ALAID and SHENYA differed slightly in latitude and longitude from that obtained by applying the datum difference.

<table>
<thead>
<tr>
<th>SHENYA:</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>By applying datum difference</td>
<td>36° 44’ 36.3591</td>
<td>174° 05’ 41.7655</td>
</tr>
<tr>
<td>As recomputed by Shelton</td>
<td>36° 44’ 36.594</td>
<td>174° 05’ 41.072</td>
</tr>
<tr>
<td>Difference</td>
<td>60.003</td>
<td>-0.583</td>
</tr>
</tbody>
</table>

After the parties had returned to Seattle, the Army furnished a revised length of their base line on Shemya Island, which gave a slightly different length of the line SHENYA-SAN 2 than that furnished the SURVEYOR by the Resident Engineer.

The triangulation executed by the SURVEYOR in the Semichi Islands, 1944, was recomputed using the position of SHENYA and azimuth SHENYA-ALAID as determined by Shelton's recomputations, and for length, the revised length of the line SHENYA-SAN 2.

The following agreements were obtained on the line OALE-SHENYA:

- Computed from Army base on SHENYA: 6225.52 meters
- Computed from Massacre Bay base: 6225.16 meters

Difference: 0.36 meters (approximately 1 part in 17,000)

<table>
<thead>
<tr>
<th>Position of ALAID:</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recomputed by Shelton (Massacre Bay base)</td>
<td>36° 44’ 1364.9 m</td>
<td>173° 52’ 144.9</td>
</tr>
<tr>
<td>Recomputed SURVEYOR's work (Army adjusted base)</td>
<td>36° 44’ 1367.4</td>
<td>173° 52’ 144.9</td>
</tr>
<tr>
<td>Difference</td>
<td>0.5 m.</td>
<td>0.0 m.</td>
</tr>
</tbody>
</table>
ADDITON TO DESCRIPTIVE REPORT T-6931-A and B

Washington Office - May 15, 1945

Detail shown in green on T-6931-A and B was compiled from air photographs in this office.

Photographs:

2-2, 2-3, 5-3, 6-22, 1-V-1 thru 1-V-9, scale 1:10,000,
1-V-12 thru 1-V-14, 16, 17, 18, scale 1:10,050, 1-V-24,
29, scale 1:10,000, 1-V-45, 46, 47, 48, scale 1:8,000,
2-V-16, 17, 18, scale 1:8,000, 1944.

Field Inspection:

Photographs field inspected by planetal party only to
the extent of locating hydrographic signals and tri-
angulation. No shoreline or other detail inspected.

Compilation:

Compilation was done by holding hydrographic signals and
triangulation that were identified on the photographs.
Shoreline and other shore and off-shore detail was delineated
on the photographs with the aid of a stereoscope and
projected onto the sheet by use of a vertical projector.

Note: Photo interpretation of kelp areas are considered
good, but are indicated with the reservation that some
areas may have some discrepancy in the actual definition of
their boundaries. Small island areas shown with a solid
line maybe ledges or rocks awash at high water.

Compiled by: D. Moseley
Verified by: T. Maki

Inspected by: C. Landy

J. Jones

J. A. McCormick

R. H. Caruthers

10/11/45

8/11/45
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. S-D-44

REGISTER NO. T-693lb

State ____________________________ Alaska - Aleutian Islands

General locality ____________________________ Aleutian Islands - Semichi Group

Locality ____________________________ Semichi Islands to Shemya Island to Fassan between Shemya and Nizki Islands

Scale 1:5,000 Date of survey Sept. 1-2, 1944

Vessel ____________ SURVEYOR ____________

Chief of party ____________ C. D. Meaney ____________

Surveyed by ____________ J. C. Bose ____________

Inked by ____________ J. C. Bose; Lettering by V. R. Sobieralski ____________

Heights in feet above ________ to ground ________ to tops of trees

Contour, Approximate contour, Form line interval ________ feet

Instructions dated ________ Feb. 1, 1944 (Director's Suppl.) ________ May 17, 1944 (Liaison Officer)

Remarks: ____________________________

__________________________
Descriptive Report

to Accompany
Topographic Sheet, Reg. No. 6931b.

Shemya Island - Aleutian Is.

Instructions: The survey was made in accordance with Supplemental Instructions from the Director, dated February 1, 1944, Project CS-21a, and instructions from Lieut. Comdr. C. M. Durgin, Liaison Officer, dated May 17, 1944, Project 2.

Limits of Survey: The area covered by the survey are the passes between Shemya Island and Nushagak Island, and includes the main group of small islands in the passes. It lies between latitude 53° 43' and 53° 44' N, and between longitude 176° 01' and 176° 04' W. The scale of the sheet is 1:5,000. The sheet is an aluminum mounted sheet, on the reverse side of which is graphic control survey No. 6931a, for which a separate report has been written.

Survey Methods: Standard planable methods were used. Adequate control existed, since every signal on the sheet - the white washes shown by circles as well as the more definite points shown by triangles - were located by triangulation. Several sets of air photographs, showing the area covered by this planable sheet, were turned over to the SURVIVOR by the Army and the Navy, so that considerable additional information is available, especially as regards the shoreline of Shemya and Nushagak Islands and the small rocky islets on which triangulation stations LIE and JULY are located. The photographs are being submitted with graphic control sheets Nos. 6931a and 6932. Sufficient signals to control the photographs were pricked and marked on the photographs.

Description of Terrain: The most southerly of the three islands (on which station TOP is situated) is the most prominent. It is approximately 40 feet high and has a steep shoreline. It is rather flat on top, although the high point is definitely enough to be discernable. It is surrounded by a considerable area of rocky ledge, most of which is covered by high water, but has a considerable number of high rocks which remain above M.H.W. The eastern and southern shores are the boldest; the west shore has a strip of gravel between the M.H.W. line and the steep side; and the north shore of the island consists of sand beach between the ledge and the high ground. Here, the slope to the top is the gentlest. The north end of the island usually affords the best place for a boat landing. The island is the meeting
ground of large numbers of gulls, cormorant, and other sea birds. Strangely enough, in spite of its small size and its location in a pass frequently made dangerous to very small boats by strong currents and tide rips, it seems to have been of some importance to human beings, perhaps to an old race of primitive people. This conclusion was drawn from the large number of stone arrowheads and other small stone implements which were found in the soft, fine, sandy material which covers the island, probably to considerable depth.

The narrow island north of station TOP, on which station LOTUS is situated, is approximately 30 feet high. It is rocky and steep on the east and west sides, tapers to a low, flat point at the north end, and has a small, rounded sand beach at the south end. A wrecked barge lies on the sandy part of the island. This barge is easily recognised on the photographs and is also shown on the planetable sheet. The space between the two islands is very foul and not navigable.

The third island, southeast of station LOTUS, is approximately 20 feet high. It is rocky and irregular.

The four buoys in the east pass are spherical mooring buoys, planted by the Army Transport Service as aids to navigation. The two east buoys are red and the two west buoys are black.

Junction and Comparison with Other Surveys: This sheet joins Graphic Control Sheet No. 6932 (1:10,000) on the east and Graphic Control Sheet No. 6964 (1:20,000) on the west. There is no discrepancy.

The only other known survey covering this area is the Army quadrangle map. This map is extremely sketchy in this area and shows all kelp areas as rocky ledge.

Geographic Names: Since almost every Aleutian Is. pass takes the name of the island to the eastward, the easternmost pass between Shemya and Nigiti Is. might properly be called Shemya Pass.

The island on which station TOP is located, was called Hammerhead Island by some Army officers. The origin of the name is not known.
Statistics:

Area, square statute miles ------------------ 0.67
Shoreline, statute miles ----------------- 1.3

Respectfully submitted,

J. C. Bose,
Lieut. Comdr. C. & O. S.

Approved and Forwarded:

C. D. Meaney
Comdg. Officer
U.S.C. & G.S.S. SURVEYOR.
DATUM

There is a small difference of approximately 11 meters between the coordinates of triangulation stations determined in the field and those later computed. In the later computations a more accurate determination of azimuth and length and also of the position of the initial station SHERVA were used than was available to the field party.

The latitude and longitude of the reference station as recomputed is shown on the sheet in pencil. Also shown is the recomputed datum mark.

All hydrographic sheets submitted in 1946 with the exception of N-6907, which has been forwarded to Washington, are based on the recomputed datum. The hydrographic base sheets submitted by the SURVEYOR are on the field datum. Those submitted by the EXPLORER with the exception of N-6907 are on the recomputed datum.

The following is a brief resume of triangulation in the Bear Islands as used for control on hydrographic and topographic sheets.

The triangulation in the vicinity of Massacre Bay, by Scalf in 1943, started from an assumed datum. Scalf's work was extended north by Sylar, U.S.N., to make a recovery of the Navy's astronomical station of 1934, which was near station CHIC. Assuming the position of station CHIC to be the same as the astronomical station, the following datum differences were obtained:

<table>
<thead>
<tr>
<th>Datum</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scalf's datum</td>
<td>52°56'18&quot;</td>
<td>175°14'47&quot;</td>
</tr>
<tr>
<td>CHIC 1943</td>
<td>52°55'48.2&quot;</td>
<td>175°14'24.5&quot;</td>
</tr>
<tr>
<td>U.S.N. Observation Pier 1954</td>
<td>52°56'48.2&quot;</td>
<td>175°14'24.5&quot;</td>
</tr>
</tbody>
</table>

Correction from Scalf and Sylar, 1945, to U.S.N. 1954 ------------ 30.068 35.300

Note: The astronomical pier is five or six feet from CHIC and is exactly on the line towards RAF 1948. The pier was too large for Sylar to occupy with his instrument without leaning against the pier, which sat in tundra and moved under pressure. Hence the new station. See Sylar's description for distance between them. This difference has been ignored and CHIC assumed to be a recovery of the astronomical station.

When plotting the 1943 smooth sheets, the difference above was applied to all of Scalf's and Sylar's geographic positions to bring the sheets on the U.S.N. 1954 datum.
In 1944 when the party on the SURVEYOR took up work in the
Semihi Islands, the coordinates of stations SHETYA and ALAID as deter-
mined were used in their triangulation computations. To reconcile the
azimuths so these positions could be used on Form 27 "Position Computation",
an inverse computation was made. Starting with the position of SHETYA as
determined, and using the azimuth of the line SHETYA-ALAID as determined
by the inverse computation and the length of the line SHETYA-SAN 2 as
furnished by the Resident Army Engineer, the positions of triangulation
stations in the Semihi Islands were computed. The positions of triangula-
tion stations on this topographic sheet were so determined.

Later in the season, the triangulation executed by Scales and
Sylar was recomputed by Lt. Comdr. Shelton on the HSPLUN, starting with
the astronomical position of station CHIC as determined by the Navy in
1934 (USN GMSR 1934 datum). This data was not available to the party
on the SURVEYOR at the time work was commenced. The recomputed values of
ALAID and SHETYA differed slightly in latitude and longitude from that
obtained by applying the datum difference.

<table>
<thead>
<tr>
<th>SHETYA</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>By applying datum difference</td>
<td>52° 44' 26.7591</td>
<td>173° 05' 41.7555</td>
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<tr>
<td>As recomputed by Shelton</td>
<td>52 44 26.8944</td>
<td>173 05 41.0722</td>
</tr>
<tr>
<td>Difference -------------</td>
<td>0.003</td>
<td>-0.683</td>
</tr>
</tbody>
</table>

After the parties had returned to Seattle, the Army furnished a
revised length of their base line on Semih Island, which gave a slightly
different length of the line SHETYA-SAN 2 than that furnished the SURVEYOR
by the Resident Engineer.

The triangulation executed by the SURVEYOR in the Semihi Islands, 1944,
was recomputed using the position of SHETYA and azimuth SHETYA-ALAID as deter-
mained by Shelton's recomputations, and for length, the revised length of the
line SHETYA-SAN 2.

The following agreements were obtained on the line GALO-SHETYA:

Computation from Army base on SHETYA: 6223.52 meters
Computation from Massacre Bay base: 6223.16 meters

Difference ------------------------------- 0.36
(approximately 1 part in 17,000)

Position of ALAID:

<table>
<thead>
<tr>
<th>Recomputed by Shelton (Massacre Bay base)</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recomputed SURVEYOR's work (Army adjusted base)</td>
<td>52° 43' 1236.9 m.</td>
<td>173° 59' 144.9</td>
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<tr>
<td>Recomputed SURVEYOR's work</td>
<td>52 43 1236.4</td>
<td>173 59 144.9</td>
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<td>Difference -------------------------------</td>
<td>0.5 m.</td>
<td>0.0</td>
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ADDITION TO DESCRIPTIVE REPORT T-6931-A and B

Washington Office - May 15, 1945

Detail shown in green on T-6931-A and B was compiled from air photographs in this office.

Photographs:

2-2, 2-3, 5-3, 6-22, 1-V-1 thru 1-V-9, scale 1:10,000, 1-V-12 thru 1-V-14, 16, 17, 18, scale 1:10,050, 1-V-24, 29, scale 1:10,000, 1-V-45, 46, 47, 48, scale 1:8,000, 2-V-16, 17, 18, scale 1:8,000, 1944.

Field Inspection:

Photographs field inspected by planetal party only to the extent of locating hydrographic signals and triangulation. No shoreline or other detail inspected.

Compilation:

Compilation was done by holding hydrographic signals and triangulation that were identified on the photographs. Shoreline and other shore and off-shore detail was delineated on the photographs with the aid of a stereoscope and projected onto the sheet by use of a vertical projector.

Note: Photo interpretation of kelp areas are considered good, but are indicated with the reservation that some areas may have some discrepancy in the actual definition of their boundaries. Small island areas shown with a solid line maybe ledges or rocks awash at high water.

Compiled by: D. Moseley

Verified by: [Signature]

Inspector by: L. C. Randly

J. J. Jones

J. A. McCombick
10/11/45

D. H. Casolinos
8/10/46
<table>
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<tr>
<th>Name on Survey</th>
<th>OP Chart No.</th>
<th>On previous survey</th>
<th>U.S. Quadrangle No.</th>
<th>Maps</th>
<th>From local information</th>
<th>On local Maps</th>
<th>P.O. Guide or Map</th>
<th>Rand McNally Atlas</th>
<th>U.S. Light List</th>
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Names underscored in red approved by H. Hecker 10/11/43.
0,6931ab applied to chart 9125 3 m a. May 15, 1945

91982585 3 m a. June 1945