

6602

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. PATTON, Director

State: Aleutian Is.

U. S. COAST & GEODETIC SURVEY
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APR 18 1938

Acc. No.

Topographic }
Hydrographic } Sheet No. A- 37

LOCALITY

~~ALUTIAN ISLANDS~~
~~Unimak Island~~
WEST END OF UNIMAK ISLAND
Cape Sarichef to ~~Middle Point~~ Sennett

1937

CHIEF OF PARTY

RAY L. SCHOPPE

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. A-37

REGISTER NO.

T6602

State ~~ALASKA~~ Aleutian Islands

General locality West End of Aleutian Islands Unimak Island

Locality Cape Sarichef to Middle Point Sennett Point
West end of Unimak Island

Scale 1-20,000 Date of survey July 27 to Aug. 13, 1937

Vessel DISCOVERER

Chief of party Ray L. Schoppe

Surveyed by Curtis Le Fever

Inked by Curtis Le Fever

Heights in feet above There are no trees on Unimak Island
to ground to tops of trees

~~Contour, - Approximate contour, Form line interval~~ 100 feet

Instructions dated March 7³⁰, 1937⁶

Remarks: _____

Remarks.

Decisions

1	For Title Only	USGB decision
2		
3		USGB decision
4		
5	Small steep hills inland which appear to be on the slope of Pogromni Volcano	Leave names in pencil on Topo sheet
6		
7		
8		
9		
10	Name of triangulation station is sufficient for this feature.	
11	See Baker Red R. or Cr. in N.E. part of Unimak I. not inked on sheet.	Beartrack Cr. *
12	Submitted to USGB - Sennett Pt favored	sub. to USGB 5/28/38 U.S.G.B. Decision 6/3/38 see H-6278
13		see H-6278
14		
15	From information in descriptive report	
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GEOGRAPHIC NAMES

Survey No. T-6602

GEOGRAPHIC NAMES												
Survey No. T-6602												
Name on Survey	On Chart No. 8860											
	A,	B,	C,	D	E	F	G	H	K			
<u>Unimak Island</u>	✓									1		
Lava										2		
<u>Unimak Pass</u>	✓									3		
<u>Red Hill</u> ✓				✓						4		
<u>Three Sisters</u>				✓						5		
<u>The Pope</u>				✓						6		
<u>Arrowhead</u>				✓						7		
<u>Sealion Point</u> ✓				✓						8		
Round Hill				✓						9		
<u>Threemile Hill</u>				✓						10		
Red River				✓						11		
Sennett										12		
<u>Middle Point</u> ✓	✓	✓			✓					13		
<u>Cape Sarichef</u> ✓	✓									14		
										15		
<u>Three Landings</u> ✓										16		
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Names underlined in red approved

by ghe on 5/27/38

M 234

Names underlined in red approved

by WJE on 5/27/38

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
 DESCRIPTIVE REPORT } ~~No. T-6602~~
 PHOTOSTATIC OF } No. T-6602

{ received April 18, 1938
 { registered May 26, 1938
 { 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.

ROUTE		Initial	Attention called to
20			
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RETURN TO

82	T. B. Reed
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✓ JBR

6602

1

DESCRIPTIVE REPORT
to accompany
TOPOGRAPHIC SHEET A-1937 T-6602
Project No. HT-208

U. S. C. & G. S. S. DISCOVERER

R. L. SCHOPPE, COMMANDING

INSTRUCTIONS

Directors Instructions dated March 7³⁰, 1937⁶.

LIMITS

The coast line surveyed on this sheet extends along the western end of Unimak Island, Western Alaska, from hydrographic station OWL which is one mile north east of Cape Sarichef Lighthouse, south along the western end of the island. It includes the lighthouse reserve and the coast line to the south as far as a junction with topographic sheet B-1937 at ~~Middle~~ Point. T-6603

Sennett

DESCRIPTION

The western end of Unimak Island is a number of low conical shaped peaks surrounding the higher peak Pogromni. On this sheet the area near the coast line is rather flat and is covered by grass and a heavy growth of moss. This flat area rises gradually to the slopes of the peaks, which are bare. These slopes show red or black in the distance and blend into the higher sides of Pogromni and other high peaks in the background. Throughout most of the summer Pogromni is covered with snow well down it's sides.

From off Cape Sarichef Light looking shoreward, one of the most prominent features in the foreground is a symmetrical shaped bare, black peak lying about 3 miles inland. It is an extinct volcanic cone with a small crater at it's top, approximately 250 feet deep. A large lava flow extends from it's base toward the sea. The face of this flow forms a part of the coast line, just south of the light house. The surface of the lava is black and very irregular and is not covered by moss and grass.

A large part of this area, that surrounding the lighthouse reserve has no surface drainage. The large amount of precipitation sinks through the volcanic soil and is carried away by underground streams. There is a system of cisterns at the Sarichef reserve in which the run-off from the roofs of the buildings is stored as water supply. The large river locally called the Red River, on the extreme north end of the sheet flows from the slope of Pogromni. It is a glacial stream and carries a heavy load of red silt. The streams on the south end of the sheet are clear and are evidently fed by melting snow and springs.

During the winter, large herds of Caribou feed on the moss and grass on this part of the Island. The keepers at the lighthouse report seeing herds consisting of hundreds of these animals. There are supposed to be about 30,000 Caribou on the Island. Some of the largest bear in Alaska are supposed to be on this island. It is a game reserve and there has been practically no hunting since 1918. A bear track was measured which was 17 inches long and 11 inches wide. Many bear tracks were seen but evidently these animals have a keen sense of smell and hearing and avoided the parties. The triangulation party saw nine bear during the season, the topographic party saw only two. There are several kinds of berries growing there upon which they feed. The light house keepers say they catch the caribou also for food and I have seen them digging for the ground squirrels. A large number of red foxes were seen also. The foxes probably feed largely on the ground squirrels of which there are a great many. Several different kinds of birds were seen. A few families of large white swan were seen, also Ptarmigan.

The coast line throughout most of this sheet is bold and rugged with many off-lying rocks. On the Sarichef lighthouse Reserve, is a group of large white buildings setting at the base of a steep grassy bluff and facing a small sand beach. The lighthouse is also white and sets north of the other buildings and part way up the steep slope. It is located so that it has the bluff as a back ground and it is not very high, as the low fogs in that area would keep a high light from being seen.

Supplies and mail are landed for the lighthouse keepers in the small cove, directly below the lighthouse and at the end of the railway. The best time of the year for making landings in this vicinity, according to the keepers who have watched conditions from year to year, is during the month of August and the first 15 days of September. This landing is well protected by off-lying rocks. The small boat comes alongside the rock ledge and a boom, located at the end of the railway, is used for hoisting supplies from the boat onto the rocks. The boom and part of the track which runs out on this ledge are removed to higher ground in the winter as they would be carried away during a storm. The keepers report that the water has washed into the houses as much as 2 feet deep on the first floor, during a bad storm.

The beach north of the reserve is very rocky, with dangerous off-lying rocks. It is exposed to the full sweep of the Bering Sea. The area shown as breakers in latitude 54 36.4' was observed in heavy weather as a series of large breakers as shown on this sheet.

A landing should not be attempted on the small beach directly below the houses at the Sarichef Reserve and between the two projecting ledges. Heavy swells from the open sea seem to come in here at all times. The longer beach south of the Reserve and joining the north edge of the lava flow is also exposed and is steep and rocky.

The face of the lava flow, the north edge of which is 650 meters south of the light house is vertical with large partially submerged rocks at it's base. The face of the flow is perforated with large lava caves which are partially filled with water. On top of the flow are blow holes through which spray shoots during heavy weather. The lava flow must have projected much

farther into the water at one time as is obvious when observing how molten it must have been to have spread south along the base of the bluff.

The hydrographic station IS in latitude 54 34.7 is a large rock very prominent from aboard ship. That is, when the ship is not so far off that the lava in back forms a background. This rock is a portion of the lava flow and from wave action has been detached from the face of the lava. Its height is about the same as the adjoining lava.

This flow of lava came from the black crater which lies about three miles inland. As it approached the coast line it was split by a higher part of the older formation. The northern arm of the lava flowed over a low place in the bluff which probably then paralleled the beach. It then spread out fan shaped, the south edge of it following close to the face of the bluff. The lava today ends abruptly against this older bluff line. It leaves a part of the old coast line projecting out into the water and forming a narrow point which is considerably higher than the newer lava flow. This point has a vertical face and no beach at its base. It is locally called Sea Lion Point as herds of these animals frequent this vicinity and lie on the few rocks which are close to the base of the point. The south portion of the lava flow also flowed over the low bluff and spread out at its base. It ran north along the base of the bluff and almost to the end of Sea Lion Point. A small part of the old beach just south of the point was not covered by lava but was shut off from the surf action so it lies there today as it existed probably thousands of years ago. The face of the lava flow, south of Sea Lion Point is much more irregular. Long rough ledges of the cooled lava run off shore having narrow deep channels between. Sea Lion point has partially protected this part of the flow from the severe winter storms from the Bering Sea which probably accounts for its irregular face. Several dangerous partially submerged rocks lie near the face of this part of the flow.

A line of tide rips extends off shore from the vicinity of Sea Lion Point. The direction of this line of rips was determined by the triangulation party while observing at station Luck-1937.

Between the south edge of the lava flow and the older formation in Lat. 54 34.0 is a small rocky beach. This beach is very well protected by rocks and ledges and could be used as an emergency landing in rough weather. From this beach south rises a bold rocky bluff. Triangulation station Sarichef 1936 is on its highest point and close to its face. At the base of this bluff is a high surf-worn ledge on which are great large boulders which have been dislodged from the bluff above during the process of erosion. There are many partially submerged rocks lying close into the edge of this ledge. A traverse was run along the ledge and also one was run along the top of the bluff. Heavy kelp beds parallel this part of the coast. Two hundred twenty meters southwest of station Sarichef is a rocky islet which is detached from the shore except at extreme low water. The islet is used as a nesting place by many sea birds and is partially covered with bird lime. This islet is not prominent from seaward. The short stretch of beach south of the small island is very rocky and unprotected from heavy surf action. Kelp beds extend well off shore in this vicinity.

Southward from the small beach the coast is a series of water worn ledges with many off-lying rocks extending off shore into the heavy kelp beds which surround them. This part of the coast is very dangerous and should not be approached at any time. Back of this part of the coast is a large flat grass covered area, sloping gradually upward to the base of Three Mile Hill. In latitude 54 31.7 a vertical faced bluff rises abruptly and extends for six tenths of a mile where it bends abruptly eastward forming the north side of the large bay, which lies north of Middle Point. Heavy seas beat against the base of this bluff at all stages of the tide. At its south end and near where it changes its direction, there are several large off-lying rocks. Most of them project about 12 feet above mean lower low water. All details along this part of the coast were necessarily located from on top of the bluff. Kelp beds parallel the face of the vertical bluff and extend northward along the rocky area previously described in this paragraph.

At the north end of the wide bay lying north of ~~Middle Point~~ ^{Sennett} the coast line bends eastward then sharply southeastward. Along this southeast coast the bluff gradually increases in height to about the middle of the bay then drops again to a low grass covered bank at the south end. There are two narrow valleys leading inland just north of ~~Middle Point~~ ^{Sennett}. There is a beach running the length of this part of the coast. At the north end it is very narrow, steep and rocky. There are dangerous off-lying rocks surrounded by heavy kelp beds. In latitude 54 30.8, longitude 164 55.0 is a large rock which is 160 meters outside highwaterline. It is 18 feet above water and stands out because of its heavy covering of bird lime. A dangerous group of rocks is located 370 meters offshore, in latitude 54 30.0, longitude 164 54.5. These rocks bare 8 feet at mean lower low water. From the rock ledge directly inshore from this group of rocks a wide sand beach extends southwest to Middle Point. At the south end of this beach and close inshore is a group of rocks, the highest of which is 18 feet above mean lower low water. Just south of these rocks and between them and rocky ledges running out from the point is a small protected beach. When the weather is southerly, this beach is the best place to land a small boat along this part of the Unimak Id. coast. It is used for landing mail and supplies for both Sarichef and Scotch Cap Lighthouses when landings cannot be made at either lighthouse. There is a small cabin at this point which is owned by the Lighthouse Service and in which there is a stove and some food at all times. When the weather is from the north the landings are made in the bay, just south of ~~Middle Point~~ ^{Sennett}. This landing is located on topographic sheet B-1937. T-6603.

~~Middle Point~~ ^{Sennett} is low and grass covered with a bold, rocky coast line. Water worn ledges run out into deep water and several detached rocks lie near the faces of the ledges.

CONTROL

The Unalaska Datum is used on this survey. The general scheme was established in 1936 to the line, Middle Pt.-Scotch Cap, by the personnel of the DISCOVERER. Supplemental triangulation stations were located this year by Lieut. Bowie, attached to this ship. The triangulation stations are close together and very well located for topographic purposes. The 1936 location of triangulation station Sarichef was too weak for use.

It was re-located in 1937 but is stamped 1936.

SURVEY METHODS

A camp was established at Middle Point from which the south half of this sheet was completed. While working on the north half of the sheet the topographic unit along with the triangulation party lived in one of the houses on the Sarichef Lighthouse Reserve. Permission was obtained from the Lighthouse Superintendent to occupy this dwelling. The keepers were eager to cooperate with us in every possible way and made our stay at the reserve very interesting.

The triangulation and topographic units, each consisting of one officer and three men worked in close cooperation lending men and assistance to each other when it was in the interest of the progress of the combined party to do so.

The four horses which were shipped to False Pass from Seattle at the beginning of the season were used continually by the combined party. They were used to transport camp and personal gear and equipment between camps and also for carrying instruments and signal building gear to and from work. The horses were experienced pack animals and were carefully chosen. They proved to be invaluable as a time and labor saver.

The usual method of plane table topography was used. The short traverses between triangulation stations required very little field adjustments. All offshore details when possible were located by three or more cuts, their elevations being determined by vertical angles and check angles. The inshore details were located by cuts and elevations determined by vertical angles. Many of the cuts and angles were taken by the triangulation party. The boundaries of the lava bed on this sheet were located by topography near the beach, but inland were scaled from the air photographs of this area. The few streams were also scaled from the air photographs, except near the beach, where they were rodged in. The air photographs were used continually and proved to be valuable to determine the nature of the coast line ahead of the surveying party. They were used extensively for getting the correct shape of hills and directions of valleys, thereby making the form lines on the sheet much more accurate than they could possibly have been without the expenditure of a lot more time on the field survey. Due to the considerable and abrupt changes in elevations and the variable scale of the photographs they could not be relied upon for actual mapping.

LAND MARKS FOR CHARTS Chart Letter #255(1938)

Descriptions of the following features are submitted on form No.524 & 525.

Sarichef Light House	Latitude	54-36-24.6	meters
	Longitude	164-55-719.5	"
<u>IS</u> Large detached vertical sided rock.	Latitude	54-34-1203.0	"
	Longitude	164-56-866.0	"
Extinct Volcanic crater	Latitude	54-33-1340.0	"
	Longitude	164-52- 68.0	"
Red Hill	Latitude	54-35-1200.0	"
	Longitude	164-52-420.0	"

LIST OF NAMES

The following are established names in this vicinity: Red Hill, Three Sisters, The Pope, Arrow Head, Sea Lion Point, Round Hill and Three Mile Hill.

STATISTICS

Statute miles of shore line - - - - -	11.0
Square statute miles of topography - - - - -	55.0
Determined elevations of off-shore rocks - - -	54.0
Determined elevations of points on land - - -	40
Magnetic meridians determined - - - - -	1

137 square
-40
97

Respectfully submitted,

Curtis Le Fever

Curtis Le Fever,
Jr. H. & G. Engineer,
U. S. C. & G. Survey.

Approved and forwarded,

Ray L. Schoppe

Ray L. Schoppe,
Chief of Party, C. & G. Survey
Commanding Ship DISCOVERER.

80-LEF

July 21, 1936.

To: Commanding Officer,
U. S. Coast and Geodetic Survey,
Ship DISCOVERER,
601 Federal Office Building,
Seattle, Washington.

From: The Director,
U. S. Coast and Geodetic Survey.

Subject: Elevations of offlying rocks on topographic surveys, 1937.

There is some uncertainty in this office as to the datum plane to which the elevations of offlying rocks were referred on topographic surveys Nos. T-6602, 6603, 6604 and 6605 (Field Nos. A-37, B-37, C-37 and D-37). These surveys were all made by Lieutenant Le Fever.

The following is quoted from the review of survey T-6602, and is applicable also to the other three surveys:

"Rock symbols and legends.---These do not conform to the topographic manual nor to standard practice. See par. 161, 37 and 38. Rocks smash should be related to mean lower low water, and those bare at all times should be shown by the dry rock symbols with heights above high water (but no legends). Both on the sheet and in the descriptive report all legends are related to mean lower low water, regardless of the heights of the rocks. For instance: the sheet has the rock smash symbol and legend 10' m.l.l.w. whereas it should have been shown as a dry rock and (5') in red. The sheet shows 13 such cases with legends ranging from 6' to 11' m.l.l.w., and all should be revised.

"Another typical case: The Descriptive Report describes a rock as 18' above m.l.l.w., and the sheet shows it as a dry rock with (18) in red. If the Descriptive Report is correct then the elevation should have been (13'). This case appears to indicate that all of the 14 dry rocks on the sheet which have elevations in red should have 5 feet subtracted from each elevation. A photostat of the sheet has been forwarded to the field party for indicating corrections to rock symbols and legends."

A photostatic copy of T-8802 is being forwarded to you, under separate cover, and it is requested that corrections to the elevations be indicated by the topographer and the photostat returned to this office. The specific point in question is whether the elevations for dry rocks, shown by red figures in parenthesis are above M.L.L.W. or above high water and whether this also applies to the other three surveys.

Director.

POST-OFFICE ADDRESS: 601 Federal Office Bldg.
Seattle, Washington.
TELEGRAPH ADDRESS:
EXPRESS ADDRESS:

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

August 23, 1938

To: The Director,
U. S. Coast & Geodetic Survey
Washington, D. C.

From: The Commanding Officer,
Ship DISCOVERER

Subject: Elevations of offlying rocks on topographic survey 1937.

Reference: (a) Directors letter of July 21, 1938 No. LEF-80
(b) Photostat Copy T-6602.

Elevations and symbols for rocks with the following
geographic positions have been revised on photostat copy of
T-6602 which is being forwarded under separate cover, to conform
with par. 161, 37 & 38 of the topographic manual.

Position Lat. & Long.	Elevation originally shown above M.L.L.W.	Corrected elevation above M.H.W.	Symbol changed
54 36 20mtrs.			
164 55 875	6 ft.	1 ft.	yes
54 35 418			
164 56 471	8	3	yes
54 34 1200			
164 56 878	40	35	no
54 34 163			
164 56 687	12	7	no
54 34 133			
164 56 692	8	3	yes
54 33 1702			
164 56 469	15	10	no
54 33 392			
164 56 472	14	9	no

Position Lat. & Long.	Elevation originally shown above M.L.L.W.	Corrected elevation above M.H.W.	Symbol changed
54 32 1412mtrs. 164 56 408	7 ft.	2 ft.	yes
54 32 1380 164 56 422	8	3	yes
54 32 1160 164 56 371	7	2	yes
54 32 1120 164 56 448	6	1	yes
54 32 772 164 56 414	11	6	yes
54 32 208 164 56 254	15	10	no
54 31 1804 164 56 200	12	7	no
54 31 1392 164 56 120	6	1	yes
54 31 1300 164 56 126	7	2	yes
54 31 300 164 55 690	12	7	no
54 31 120 164 55 586	8	3	yes
54 31 72 164 55 528	12	7	no
54 30 1799 164 55 144	6	1	yes
54 30 1605 164 54 1057	18	13	no
54 30 542 164 54 328	13	8	no
54 30 490 164 54 394	21	16	no
54 30 450 164 54 300	13	8	no
54 30 408 164 54 248	12	7	no

Position Lat. & Long.	Elevation originally shown above M.L.L.W.	Corrected elevation above M.H.W.	Symbol changed
54 30 22 mtrs. 164 54 568	8 ft.	3 ft.	yes
54 29 1850 164 54 568	8	3	yes
54 30 76 164 54 308	21	16	no
54 29 1837 164 54 202	10	5	yes
54 29 720 164 54 216	18	13	no

*Compiled by C.L.
Checked by J.S.H.*

In those cases where the symbol for the rock has been changed from that for rock awash to that for dry rock, the rock will be covered in extreme stages of tide and heavy swell.

Like revision should be made of all elevations of off-lying rocks on surveys T-6603, 6604 and 6605 (1937).

At the time the elevations on these sheets were determined in the field, they were shown as, "bares so many feet," with time of day and date. Later, when the correct tide reducers were determined and the sheets were inked, the error was made of reducing bare rocks as well as those covered at some stage of tide to the mean lower low water datum.

Ray T. Schoppe.

*above information applied to smooth
sheet. Ham.
9/26/38*

Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY NO. 6602 (1937) FIELD NO. A-37

Cape Sarichef to Middle Point, West End of Unimak Island,
Aleutian Islands.

Surveyed in July - August 1937, Scale 1:20,000
Instructions dated March 30, 1936 (DISCOVERER).

Plane Table Survey.

Aluminum Mounted.

Chief of Party - Ray L. Schoppe.
Surveyed by - C. LeFever.
Inked by - C. LeFever.

1. Condition of Records.

The survey conforms to the requirements of the Topographic Manual except as follows:

- a. Declinatoire.-- There is no evidence that the declinatoire was checked at a station of known declination during the season's work. (Par. 17).
- b. Rock symbols and legends.-- These do not conform to the Topographic Manual nor to standard practice. See par. 16i, 37 and 38. Rocks awash should be related to mean lower low water, and those bare at all times should be shown by the dry rock symbols with heights above high water (but no legends). Both on the sheet and in the Descriptive Report all legends are related to mean lower low water, regardless of the heights of the rocks. For instance: The sheet has the rock awash symbol and legend 10' m.l.l.w., whereas it should have been shown as a dry rock and (5') in red. The sheet shows 13 such cases with legends ranging from 6' to 11' m.l.l.w., and all should be revised.

Rocks corrected by
authority of letter
dated Aug. 23, 1938,
recd from field party
and attached to this
D.R.
H.W.M. 8/28/38

Another typical case: The Descriptive Report describes a rock as 18' above m.l.l.w. and the sheet shows it as a dry rock with (18) in red. If the Descriptive Report is correct then the elevation should have been (13'). This case appears to indicate that all of the 14 dry rocks on the sheet which have elevations in red should have 5 feet subtracted from each elevation. A photostat of the sheet has been forwarded to the field party for indicating corrections to rock symbols and legends. (See par. 7, this review).

- c. Formlines.-- A considerable number of additional elevations should have been determined in order to comply with the requirement (Par. 21) that one elevation be shown every four square inches of smooth sheet topography. The Descriptive Report, page 5, states that air

photographs were used extensively in getting the correct shape of hills. However, without more elevations than were determined, it would not be possible to draw form lines with the required degree of accuracy, even with the aid of air photographs. The form lines, therefore, shall be considered as lacking the required degree of accuracy.

The Descriptive Report is clear and comprehensive and satisfactorily covers all items of importance.

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project.

3. Junctions with Contemporary Surveys.

- a. The junction on the south with T-6603 (1937) will be considered in the review of that survey.
- b. The northern limit of the present survey is the limit of the present project.

4. Comparison with Prior Surveys.

T-2547 (1901), Scale 1:40,000.

This sparsely covered small scale survey covers the entire area of the present survey.

a. Shoreline and Associated Details.

The general shoreline features are borne out by the present survey except that the latter shows considerably more rock detail.

b. Form lines and Inland Details.

Form lines are very sparse, most of them being 20 to 80 foot values which are less than the 100 foot interval used on the present survey. Agreement of such form lines as are common to the two surveys is very poor. No elevations are shown on the old survey except on the three peaks (charted) in lat. $54^{\circ} 33'$, long. $164^{\circ} 52'$. These are consistently 225 to 300 feet less than the present survey values of 1100 to 1310 feet and also vary 80 to 730 m. in geographic position.

Within the area covered, the more detailed present survey should supersede this 1901 survey in future charting.

5. Comparison with Chart 8800 (New Print dated Jan. 12, 1938).

a. Topography.

Within the area of the present survey the chart is based on surveys discussed in preceding paragraphs of this review and no further consideration is necessary.

b. Magnetic Meridian.

The value of the magnetic declination determined at triangulation station SARICHEF in lat. $54^{\circ} 36'$, long. $164^{\circ} 56'$ is approximately 20° E and is $3-1/2^{\circ}$ greater than the charted value. This matter has been referred to the Division of Magnetism.

c. Aids to Navigation.

Cape Sarichef Lighthouse agrees closely with its charted position and satisfactorily marks the features intended.

6. Field Drafting.

The inking of the shoreline and topographic features is very good.

7. Additional Field Work Recommended.

No additional field work is required. A photostat of the sheet has been sent to the field party for correction to rock legends, elevations and symbols as indicated in paragraph 1b, this review.

Answered.
See note,
par. 1b.

8. Superseded Prior Surveys.

In so far as the topography included on the present survey is concerned, the present survey supersedes the following survey for charting purposes:

T-2547 (1901) in part

9. Reviewed by - Harold W. Murray, July 12, 1938.

Inspected by - E. P. Ellis.

Examined and approved:

T. B. Reed

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

K. T. Adams
Chief, Division of Charts.

Fred. L. Peacock
Chief, Section of Field Work.

G. H. Hude
Chief, Division of H. & T.