

Diag. Cht. No. 9380

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

# DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. EX-A-50 Office No. T-7082

LOCALITY

State Alaska

General locality Norton Sound

Locality Sledge Island

19450

CHIEF OF PARTY

H. Arnold Karo

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# 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. EX-A-50

## REGISTER NO. T-7082

State Alaska
General Locality Norton Sound
Locality Sledge Island
Scale 1:20,000 Date of survey July , 1950
Vessel EXPLORER
Chief of party H. A. Karo  F. X. Popper (Sledge Island)
Surveyed by D. F. Momero (Smoreline of Seward Feninsula)
F. X. Popper Inked by D. F. Romero
Heights in feet above MLLW to ground ************************************
Contour, Approximate contour, Form line interval 100. feet
Instructions dated 19 May 1950 , 19
Remarks:
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DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET

Field No. EX-A-50

Norton Sound - Sledge Island

1950

Ship EXPLORER, H. Arnold Karo, Comdg.

#### INSTRUCTIONS:

Instructions for Project CS-341 dated 19 May 1950.

#### LIMITS OF SURVEY:

This 1:20,000 sheet covers Sledge Island and that portion of the shoreline of the Seward Peninsula that is north and northeast of Sledge Island. The location of the signals and the high water line is the limit of the information obtained on the Seward Peninsula. Form lines were drawn for Sledge Island because at the time of this topographic survey there was no photographic coverage of it.

#### CONTROL:

Existing second order and current unadjusted third order triangulation was used for control. Triangulation stations used were: SLEDGE (AMS), 1949; SLEDGE AZIMUTH MARK (AMS), 1949; HUT, 1950; SLEDGE ISLAND LIGHT, 1950; REK, 1950. All stations were on the 1927 datum and the AMS stations had been adjusted.

#### SURVEY METHODS:

Standard topographic methods were used thruout. Signals on the Seward Peninsula were located by cuts from Sledge Island Light and travesse. Signals on the east coast of Sledge Island were located by cuts from station REK and traverse. The remainder of the signals on Sledge Island were located by traverse. All traverses closed within allowable limits.

#### GENERAL DESCRIPTION:

The coast of the Seward Peninsula is a sandy beach with low marshland behind it except at the easternmost part of the sheet where a seven hundred foot hill comes almost down to the sea.

## GENERAL DESCRIPTION cont.

Sledge Island is a rocky flat topped island except near the southern extremity where the highest point, a 760 foot jagged summit, exists. The island could probably be climbed from anysside except the south but is most easily climbed from the north in the vicinity of the tide gage.

## COMPARISON WITH PREVIOUS SURVEYS:

A topographic survey of Sledge Island was made by R. L. Faris in about 1900. The north and south shores of the island in the old and the new surveys coincide closely however the positions of the shorelines vary by as much as 150 meters on the east side. It is believed that the later survey is correct and it is recommended that it supersede the older survey. If there is any doubt, aerial photographs of Sledge Island are now available and as there is adequate control it should be possible to settle any possible dispute.

## COMPARISON WITH HYDROGRAPHIC SURVEYS:

No comparison with the inshore hydrographic sheet can be made until the hydrographic sheet is smooth plotted. Shoreline applied to H-7835 (1950) (No discrepancies found)

### LANDMARKS FOR CHARTS:

There are no features in this area which should be considered as landmarks for charts except the light on the north end of the island. This has already been charted.

## GEOGRAPHIC NAMES:

All names shown on this sheet are already on present Coast Survey Charts. No other objects in this area require names.

#### ADEQUACY OF SURVEY:

The object of this survey was control for hydrography. Since this survey the entire area has been covered by aerial photographs.

#### STATISTICS:

10.4 statute miles of shoreline and signals were located.

Respectfully submitted.

7. X. Popper . X. Popper

Lieut., USC&GS H. blomero

D. F. Romero Ensign. USC&GS

Approved and forwarded.

S. B. Grenell

Commander, USC&GS

Comdg. Ship EXPLORER

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#### DIVISION OF CHARTS

### REVIEW SECTION - NAUTICAL CHART BRANCH

#### REVIEW OF TOPOGRAPHIC SURVEY

## REGISTRY NO. T-7082

FIELD NO. EX-A-50

Alaska, Norton Sound, Sledge Island

Project No. CS-341

Surveyed in July 1950

Scale 1:20,000

### Plane Table Survey

### Aluminum Mounted

Chief of Party - H. A. Karo Surveyed by - F. X. Popper and D. F. Romero Inked by - F. X. Popper and D. F. Romero Reviewed by - T. A. Dinsmore, 17 October 1952 Inspected by - R. H. Carstens

- 1. The control for the present survey is based on triangulation of 1949 and 1950.
- 2. The present survey junctions adequately with T-7076 (1950) on the west. No contemporary survey adjoins the present survey on the east.
- 3. The only prior survey in the area by this Bureau is T-2520 (1900) which covers Sledge Island. A comparison of the prior and present surveys indicates close agreement in the north and south shores of the island. However, the east and west shores of the island vary as much as 150 meters on the two surveys. The larger-scale present survey is considered to be more accurately controlled and should supersede the prior survey.
- 4. Topography charted on 9380 (print date of 9/8/52) originates with the above prior survey, surveys by the Geological Survey, together with partial application of the present survey. The charted information is entirely superseded by the present survey.
- 5. Declinatoire observations of the magnetic meridian are in substantial agreement with the charted values.

## NAUTICAL CHARTS BRANCH

SURVEY NO. T-7082

## Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
Apr 1951	9380	andras	Before Serification and Review Partially
5/18/51	9302	Picegari	Before After Verification and Review capture for the Seel
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A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.