

2614

Diag. Cht. Nos. 9302 & 9380

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey

*Topographic*

Field No. ....

Office No. ....

*2614*

LOCALITY

State

*Alaska*

General locality

*North End of*

Locality

*St Lawrence Island*

*Bering Sea*

*1902*

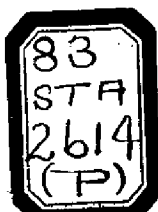
CHIEF OF PARTY

*J. F. Pratt*

LIBRARY & ARCHIVES

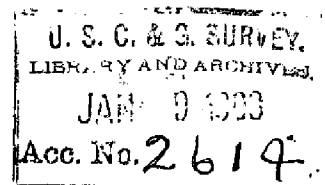
DATE

2614



S. AND J. X

DESCRIPTIVE REPORT  
to accompany  
THE TOPOGRAPHIC SHEET  
of the



NORTH EAST END of ST. LAWRENCE ISLAND,  
BERING SEA.

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Executed by

EDWIN SMITH, Assistant,

and

DON R. JEWELL, Aid,

during the season of  
1902.

Scale  $\frac{1}{20,000}$

-----O-----

Title and 3 pages.

Ass't, U.S.C. & G. Survey,  
Chief of Party.

## DESCRIPTIVE REPORT.

During this season, summer of 1902, the work entrusted to my charge, with the U.S.S. "Patterson", was primarily that of determining the geographical positions of the West end of Nunivak Island, and the Easterly end of St. Lawrence Island.

The party that I assigned for this work on St. Lawrence Island was composed of Assistant Edwin Smith, in charge of detached party, Don R. Jewell, Aid, two men and the Wardroom cook of this vessel.

The topographic work, being incidental, was executed - as the local astronomical work and the weather would permit - in August and September, 1902.

The astronomical station and camp were located on a grass covered dune about one hundred and twenty meters back from the high water line, and near the south end of a salt tidal lagoon, and about two and one-half miles S.S.W. from the most easterly point of North East Cape.

The geographical position of the astronomical station, approximately is

Lat.  $63^{\circ} 15' 48''.65$   
Long.  $168^{\circ} 43' 11''.25$

On the beach, near the astronomical station, in a northerly and southerly direction, a base of 1048.53 meters was measured with a steel base tape; the termini of this base are indicated on the sheet, as well as the Astronomical Azimuth Mark, - which is about 3000 meters north of the Astronomical station, - by which the sheet was oriented; signals were put up and determined by plane table triangulation. The shoreline for four and one-half miles south of the Astronomical station, and two and one-half miles north to North

East Cape, and four miles westward from there, was surveyed, and all details determined within the control of the triangulation points. Afterwards a careful plane table reconnaissance was made of the remainder of the shoreline and interior details, using natural objects, (rocks and boulders), for signals.

The party, necessarily being a small one, with no means of transportation beyond men's backs for carrying signal material and instruments, its radius of operation was restricted. This, with the fog that prevailed on the tops of the hills, limited the work and number of favorable working days.

North East Cape is low land extending from one to three miles inland where the mountains are abrupt, rising from 400 to 1400 feet in elevation. The low land is covered with tundra, which extends about three hundred feet up the more gentle slopes of the mountains, but the steeper slopes are bare, jagged rocks. On the North East Cape are two isolated hummocks, the most westerly having an elevation of 94 feet, the other and larger an elevation of 280 feet. The tundra is very wet except near the base of the mountains, and is cut up by numerous small streams and lakes, all of which are fresh water except the lagoon near the Astronomical station, which is a tidal lagoon.

From North East Cape south the beach is sand, with some rocks at the points. Just inside the shore line are sand dunes rising from 3 to 15 feet in elevation, back of which the tundra is but little above high water. To the west of North East Cape the beach is mostly shingle and boulder.

The contours are at intervals of one hundred feet.

The Funuk Rocks to the south did not come on the sheet, but lines to them were taken from several points. The sheet was lengthened and the two principal rocks located by these lines. The Funuk Rocks (three islands) were then put in from a reconnaissance made by the party aboard the Steamer "Patterson".

The shoreline and topography within the area of the erected signals was executed by Assistant Smith.

The outlying shoreline and topography was executed by Aid Jewell.

The projection was made at the end of the field season and shoreline inked by Assistant Morse.

All the topography was inked and the Funuk Islets plotted by Aid Jewell.