

# 7087

Graphic Control

Diag'd. on Diag. Ch. No. 8502-3

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

## DESCRIPTIVE REPORT

Type of Survey Graphic Control

Field No. PF-F-48 Office No. T-7087

### LOCALITY

State Alaska

General locality Bristol Bay

Locality Nushagak Bay, Vicinity of Nushagak  
& Clark Points

194 8

CHIEF OF PARTY

R.F.A. Studds

LIBRARY & ARCHIVES

DATE March 16, 1949

B-1870-1 (1)

# 7087

Graphic Control

MAR 16 1948

Form 537a

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

REG. NO. - GRAPHIC CONTROL T-7087

Each Topographic and Graphic Control Sheet, and each Air Photographic Drawing should be accompanied by this form, completed so far as practicable, when forwarded to the Washington office.

REGISTRY No. T-7087

Field No. PF-F-48

Scale 1:20,000

State Alaska General locality Bristol Bay

Specific locality Nushagak Bay, Vicinity of Nushagak & Clarks Points

Dates: Survey began July 1948 Completed July 1948

Photography, Supplemented by ground surveys to

Project No. CS-327 Instructions dated 20 June 1948

Vessel } or PATHFINDER Chief of party R.F.A. STUDDS  
~~Boat~~

Field work by R.C. DARLING Office work by R.C. DARLING

Final inking by R.C. DARLING

Ground elevations } in feet above { M. H. W.  
Treetop elevations } or {

Contours } by { Planetable } Interval ft.  
Approximate contours } Multiplex }  
Form lines }

REMARKS



DESCRIPTIVE REPORT  
to accompany

GRAPHIC CONTROL SHEET FIELD NO. PF-F-48 (T-7087)

AUTHORITY: Field work was carried out in accordance with the instructions by the Director for Project CS-327 dated 20 June 1946. ✓

LOCALITY: Nushagak Bay, Bristol Bay, Alaska from Nushagak to Clarks and Coffee Points. ✓

SCALE: 1:20,000 ✓

GENERAL DESCRIPTION OF AREA: The general shoreline between Nushagak and Clarks Point consists of grass marshes with slightly higher ground at the Combine Cannery and along Combine Slough. The terrain inland rises gradually and is tundra covered. Between Combine Slough and Clarks Point, there is an alder covered bluff approx. 50 feet high, inshore from the HWL. The village of Nushagak is on the north side of a grass covered hill approx. 250 feet high and is described in the report on Sheet PF-E-48 (T-7086b). Clarks Point is on slightly elevated terrain with a high bank approx. 175 feet high behind the village and cannery. The cannery operating here is the Alaska Packers Assoc. "Clarks Pt. 'Cannery' NC". There is a wharf at the northwest section of the settlement that is bare at low water. The settlement has a population of approx. 60. There is a post office, radio communications, and general store operated by the cannery.

The cannery at Combine Slough is now abandoned due to shoaling and the shallowness of Combine Slough. This place was not visited for this reason. Information was received, however, from persons who once operated this cannery.

From signal VET, South to Coffee Point, there is a bluff approx. 60 feet high at the HWL. Here, the shore in the immediate vicinity of the foot of the bluff is gray gravel. The top of the bluff inland is tundra covered with numerous lakes and scattered alders. ✓

Coffee Point once was the site of a thriving Indian community. This settlement was almost completely wiped out in the flux epidemic of 1918. What survivors remained abandoned the area and no attempt was made to resettle the section. Hence, at the present time only one shack remains standing. *Lalmh Lake, 1948*

There is an extensive mud flat between Coffee Point and the first group of buildings, South of Kanakanak. There is another extensive mud flat between Nushagak and Clarks Point. These mud flats are impossible to traverse due to the soft consistency of the mud. Landings on the shores here could only be made during the higher high tides.

CONTROL: Control for this survey was furnished by triangulation of C. LeFever in 1947. The positions are from unadjusted field computations referred to North American 1927 datum. ✓



DETAILS OF SURVEYS:

Field work was accomplished during the month of July 1948. This is a graphic control sheet for hydrographic sheets H-7669 and H-7670. Standard graphic triangulation methods were employed for locating the signals with a minimum of three cuts in all cases. No traverses were run as there was adequate triangulation control.

Because of the difficulty and time involved in making attempts to land on either shore where the mud flats are so extensive, advantage was taken of two shoals in the middle of the bay. One set-up was made on each shoal in the late afternoon at the lower-low stage of the tide. These shoals were composed of solid brown sand, making set-ups ideal. Three point fixes were taken on the triangulation on the East shore. Cuts, here could be made on all signals on the sheet, allowing ideal cuts with those already obtained at the triangulation stations Clark and Innuith Azimuth Mark. The short duration of the tide remaining at low water and because of its rate of rising, it was impossible to rod in the limits of these shoals. However, in order to aid the hydrographer, these shoals were sketched in at the time of occupying. In order to differentiate between accurately lower low water line location and the method employed here, a dotted line was used on the sheet. It should be borne in mind that these shoals are only sketched in, but when the hydrography is carried out in this area, the hydrographer will welcome this information. Local pilots report that these shoals will move in position over a few years time due to current and ice action.

This survey was carried out in conjunction with Air Photo Party of A. Newton Stewart. The control stations from the radial plot were inadequate for supplemented hydrographic control, hence the necessity for a graphic control sheet. The compilation sheet and descriptions were not received by this party until after this graphic control sheet was completed. This accounts for the location of different points on a common structure between the graphic control location and that of the air photograph.

No high water line was located as set-ups were made at triangulation stations on high ground back from the shore and on two shoals in the middle of the bay.

The low water line was located by the hydrographer.

JUNCTIONS: This sheet joins PF-E-48 on the Northeast at triangulation station Innuith Azimuth Mark 1947. No recent survey has been made from the Southern limits of this sheet.

COMPARISON WITH PREVIOUS SURVEY T-2966: Coffee Point - native village abandoned.

The previous survey is on an independent datum, while this survey is based on the 1927 N.A. datum.

A cursory examination of the topographic sheet of 1910 was made. However, as the 1948 sheet is a graphic control survey, a complete shoreline comparison was impossible.

A more thorough examination should be made in the office with the air photographic compilations for the area in order to reveal the tidal and ice action on the shoreline.



MAGNETIC DECLINATION: The magnetic meridian observation was taken at triangulation station INNUIT AZ. MK. 1947. There was apparently no local disturbance at intermediate set-ups. ✓

The declinoire used was standardized at the Inglewood, Washington Magnetic Station on 30 April 1948, a correction of  $-0.2^{\circ}$  should be applied to the meridian as shown.

GEOGRAPHIC NAMES: There will be a separate report submitted on Geographic names for this area. ✓

RECOVERABLE TOPOGRAPHIC STATIONS: Forms 524

ACE - Top & center N church cross.  
JAKE - Top & center white washed one story cabin.  
YES - Top & center red oil tank. ✓  
WIG - Top & center twin elevated water tanks.  
VET - White framework beacon.  
WAR - Top & center white washed oil tank.

LANDMARKS FOR CHARTS: There will be a separate report submitted on Landmarks for Charts in this area. 1.70 (1949) ✓

Respectfully submitted,

*Robert C. Darling*  
Robert C. DARLING  
Lieut.(j.g.) USC&GS  
Ship PATHFINDER

Forwarded and Approved:

ROBERT W. KNOX, Commander USC&GS  
Commanding Officer  
Ship PATHFINDER

*This graphic control survey has been compared with contemporary hydrographic surveys. No further review by the Hydrographic Surveys Section is necessary at the present time.*

*J. A. Winsmore*  
8/15/49

## NAUTICAL CHARTS BRANCH

SURVEY NO. T7087

## Record of Application to Charts

[illegible]

M.2168-1

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.