

# 3701 & 3701 a

Diag. Cht. No. 8860-1

<b>Form 504</b> <b>U. S. COAST AND GEODETIC SURVEY</b> <b>DEPARTMENT OF COMMERCE</b>  <b>DESCRIPTIVE REPORT</b>	
Type of Survey	HYDROGRAPHIC
Field No.	Office No. H-3701 & 3701a
<b>LOCALITY</b>	
State	ALASKA
General locality	ILIULIUK BAY
Locality	UNALASKA ISLAND
<u>1914</u> <b>CHIEF OF PARTY</b>  J. B. Miller	
<b>LIBRARY &amp; ARCHIVES</b>	
DATE	NOVEMBER, 1914

3701 &  
3701 a

DEPARTMENT OF COMMERCE

Coast and Geodetic Survey,

O. H. Tittmann, Superintendent.

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ALASKA

Original Hydrographic Sheet No. ~~96~~ 3701

Unalaska Bay, Unalaska Island

Corrections to Chart 9008.

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By the Party on the C. & G. S. S. PATTERSON, September & October, 1914.

J. B. Miller, Assist., C. & G. Survey, Chief of Party

A. M. Sobieralski, Assistant, C. & G. Survey,  
in charge of hydrographic party.

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Scale 1:2000

Signals located by the plane table in September, 1914,  
from Unalaska Astronomical Station, lat.  $52^{\circ} 52' 36''$ <sup>3</sup>  
long  $166^{\circ} 32' 05''$ <sup>55</sup>

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Soundings in feet below mean lower low water.

plotted by A. M. S.

inked by J. B. M.

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Statistics.

1914 Oct. 6 a day cutter 2 miles 110 sdg's 36 positions.

A DESCRIPTIVE REPORT  
on  
HYDROGRAPHIC SHEET 98

Corrections to chart 9008, Unalaska Bay, Alaska

by the C. & G.S.S. PATTERSON, September & October, 1914.

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I have the honor to report as follows on hydrographic sheet 98, showing corrections to chart 9008, Unalaska Bay, Alaska.

The corrections shown are as follows:

- a. Soundings between Buoys No. 1 and 2.
- b. Positions of Buoys No. 1 and 2, as reset in 1914.
- c. Addition to A. C. Co. wharf.
- d. Dutch Harbor Radio - Telegraph Station.

The sheet was used also as an original plane-table sheet, and all the points located upon it depend on the following position of Unalaska Astronomical Station:

latitude  $55^{\circ} 52' 36.35$

longitude  $166^{\circ} 32' 05.55$

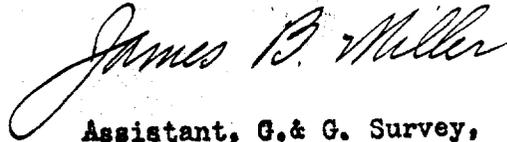
This work was done because it was reported to me by Inspector W.C. Dibrell of the Lighthouse Service that he could not find Tuscarora Rock in the position shown on chart 9008, when placing buoy No. 2, in July, 1914. It is well known by everyone frequenting Unalaska that this rock is incorrectly shown on the chart. Many other details on this chart are also incorrect, but it was not thought necessary to revise it, in the absence of instructions

to that effect.

Very respectfully,

Unalaska, Alaska,

Oct. 6, 1914.



Assistant, G. & G. Survey,

To the Superintendent,

Coast & Geodetic Survey,

Commanding.

Washington, D. C.

### STATISTICS

photographic copy of a section of  
HYDROGRAPHIC SHEET 3701.

1915	day.	vol.	sdgs.	angles.	st.miles	boat.
Aug. 28	a	1	133	80	1.5	Cutter.
Sept. 14	b	1	278	190	3.0	"
Total			411	270	4.5	

Tide staff on NW corner A. C. Co's wharf, Unalaska.

From connection with old B.M. No. 1 Plane of Reference  
corresponds to a tide staff reading of 10.30 feet.

VEC  
Apr. 21, 1915.

L. P. S.

HYDROGRAPHIC SHEET 3701.

Iliuliuk Bay, Unalaska Island, Alaska,  
by Assistant J. B. Miller in 1914.

TIDES.

	Unalaska ft.
Mean lower low water, or plane of reference on staff	1.1
Lowest tide observed " "	0.1
Highest " " " "	7.5
Mean range of tide	2.3



3701A

Hyd. 3701a

Development of Tuscarora Rock, Unalaska Bay, Alaska.

Str. Patterson 1915.

Surveyed by H. A. Seran, Assistant.

H. C. Denson, Chief of Party.

Scale 1:2000

Work depends upon position of Unalaska Observatory,  
hyd. Signal Tro, as plotted on sheet.

Hyd. 3701<sup>a</sup>

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET OF UNALASKA BAY

ALASKA.

1915.

Hydrography by H. A. Seran, Assistant.

H. C. DENSON, Chief of Party.

Str. Patterson.

The hydrography shown on this sheet was done for the further development of the so-called Tuscarora Rock in Iliuliuk Bay, Unalaska Harbor, Alaska.

#### DEVELOPMENT.

The section of this bay in the immediate vicinity of the two entrance buoys marking the channel into the inner harbor was developed by a system of lines spaced about 25 meters apart running normal to the coast. These lines were crossed by a similiar system of lines parallel to the coast and this was further crossed by lines spaced much closer together-less than 10 meters in cases- running parallel to and normal to the direction between the two buoys.

#### BOTTOM.

The bottom is very uneven and lumpy and is in general soft and sticky.

#### PLOTTING.

In plotting this work on the sheet submitted allowance was made for the distance between the leadsman's position and the position taken by the observers. This distance was constant and amounted to 4.0 meters. The difference was in the direction of the line forward as the leadsman stood in the bow and the observers had their place aft.

#### RESULTS.

Tuscarora Rock which the black buoy is supposed to mark, seems to be a lump running from shore in an almost true North-east direction. The outer or channel edge of this lump is about 10 meters slightly West of true North of the present position of the black buoy. A depth of  $15\frac{3}{4}$  feet was obtained on this the outer edge of the lump. This depth gradually shoals in-shore. The outer edge of the lump is surrounded with much deeper water, altho the whole area examined is lumpy. A depth of  $19\frac{3}{4}$  feet was obtained East of the present position of the red buoy. This might prove dangerous as the vessels in entering this inner harbor always hug the red buoy very closely.

#### RECOMMENDATIONS.

In order to have these buoys mark a perfectly clear channel from the outer to the inner harbor it is recommended that the red buoy be moved from its present position to a position about 20 meters slightly South of true East into 30 feet of water and that the black buoy be moved from its present position to a position about 15 meters slightly West of true North of its present position into 30 feet of water. If these changes are made the channel so far as the present survey indicates would be perfectly clear.

A table of statistics is attached to this report.

VEC  
Jan. 31, 1916

HYDROGRAPHIC SHEET 3701a

Unalaska Bay, Iliuliuk Bay, Alaska, by Assistant  
H.C. Denson. in 1915.

TIDES.

	Unalaska ft.
Mean lower low water, or plane of reference on staff	10.3
Lowest tide observed " "	9.1
Highest " " " "	16.5
Mean range of tide	2.3

DEPARTMENT OF COMMERCE

C. & G. SURVEY  
L. & A.  
OCT 3 1916  
Acc. No.

Hydrographic Sheet No. 370, a  
Tuscorora rock, "Unalaska Bay" Alaska

The positions for the work covered by this sheet were pro-  
tracted by the field party and have been taken as correct being ver-  
ified only when necessary to locate positions

The soundings were pencil plotted by the field party and  
were found to be correct, although fractions of feet were used as against  
"General Instructions, Par. 338,

The work appears good and sufficient to develop conditions  
over and around Tuscorora rock.

John D. Torrey  
9/26/16.



