



3696

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Department of Commerce and Labor
COAST AND GEODETIC SURVEY

O. S. Tittmann
Superintendent.

State: *Alaska*

DESCRIPTIVE REPORT.

Hyd. Sheet No. **3696**

LOCALITY:

Kushokvium T.P.

Lower Part

1914

CHIEF OF PARTY:

R. R. Lubens

11-4645

3696

Hyd. 3696
Descriptive Report of Field Sheet B

Topographic and Hydrographic

Scale 1 ; 20.000

This sheet covers the Eastern side of the river in the vicinity of Eek Island. The geographic datum depends on Sta. Beacon, which was located by a three point fix on the distant mountains. The azimuth controlling the triangulation system was measured at Apokak.

The hydrography covers the usual route from Eek channel in the middle of the river, to Beacon Point, and thence along the shore and across to the North side of Eek Island.

A tide staff and an automatic gauge were located in the slough at Apokak from which all the tidal reduction were made.

The topography was executed by Messrs. Smith and Sutcliffe. The shore is all very low and covered with tundra and without detail. On the high tides during a Southerly storm, the banks often overflow, and the country is covered for miles around. The natives have summer villages along the river, but go inland several miles to spend the winters.

The channel off Apokak appears to be well protected, but such is not the case. During a storm and at low tide a very heavy swell sweeps up this channel. The YUKON often rolled her rails under while anchored here. On the large tides the flood current is much stronger than the Eeb, and it is then when it is difficult to keep a vessel from dragging her anchor. There is ^{no} anchorage in this vicinity where a vessel can ride a storm with ease. It is practically impossible for river boats to operate in this lower river.

Hyd. 3696

List of positions scaled from sheet

By theodolite and sextant cuts
plotted graphically
1914

Name	Latitude		Longitude		Remarks
	seconds in meters		seconds in meters		
Sut	60 09	500 ✓	162 17	438 ✓	Washed away
Cliff	60 08	1245 ✓	162 17	186 ✓	" "
Lean	60 08	315 ✓	162 18	125 ✓	Not recoverable
Tow	60 08	828 ✓	162 17	495 ✓	Probably washed away
Town	60 06	1737 ✓	162 17	470 ✓	" "
Luk	60 05	1788 ✓	162 18	398 ✓	" "
Range	60 05	663 ✓	162 19	594 ✓	Tripod beacon
Drift	60 05	17 ✓	162 19	437 ✓	Pole signal

Datum depends on position of Beacon, as located by three point fix on the distant mountains. (Eek Island Datum)

Hyd. 3696
Statistics for Field Sheet

Scale 1 : 20,000

Day	Statue Miles	Positions	Soundings	
<u>Launch ALPHA</u>				
A	13.0	69	397	
B	16.0	97	525	
C	20.0	113	658	
D	10.0	48	314	
<u>Steamer YUKON</u>				
F	7.0	19	127	
H	8.0	39	229	
J	11.0	55	309	
K	39.0	164	984	
L	9.0	44	222	
R	1.5	7	28	
T	<u>11.5</u>	<u>14</u>	<u>71</u>	
Total for sheet		146.0	669	3864

Launch party, R.R.Lukens, Asst. in charge, Rt. angle and plotting
W.D.Sutcliffe, Aid, Left angle
H.H.Townsend, Chief Writer, Recording

Ship party, R.R.Lukens Asst, and E.E.Smith Asst, in charge
W.D.Sutcliffe, Aid, Left angle.
H.H.Townsend, C.W. Left angle and recording.

Positions plotted by W.D.Sutcliffe
Projection by W.D.Sutcliffe, verified by E.E.Smith.
Signals by W.D.Sutcliffe
Soundings plotted by W.D.Sutcliffe

VEC
Jan. 21, 1915
S. P. D.

HYDROGRAPHIC SHEET 3696.

Kuskokwim River, Alaska, by Assistant R.R. Lukens
in 1914.

TIDES.

	Apokok ft.
Mean lower low water, or plane of reference on staff	2.7
Lowest tide observed " "	1.1
Highest " " " "	18.0
Mean range of tide	9.4

Hyd. Sheet # 3696

Suskokwim River, Alaska.

The positions for the work on this sheet were protracted by the "Field Party" and, in general, have been taken as correct. Numerous checks were however made in order to reconcile conditions which appeared in error. The soundings were plotted by the field party.

The work in general might be considered good for reconnaissance work but certain conditions develop which would indicate error either in angle or signal or both and which ordinary adjustments fail to correct. This is particular the case in the channel north of Eck Id. In this case careful plotting develop two lines of deep soundings with two lines of shoal soundings between, which condition, according to Asst. Lukin, is improbable. The channel, according to Asst. Lukin, and which the plotting would indicate, is close to the north shore of Eck Id. The channel is narrow and therefore it seems, ^{probably} that the shoal lines referred to should be plotted farther north. However this would appear of little importance as 7 feet seems to be the maximum depth that can be taken over the shoal below.

Additional work in this location would appear advisable

J. J. Torrey
2/15/15.

Capt. Lukin was in the
office when this sheet was
plotted & consulted frequently
thereon.