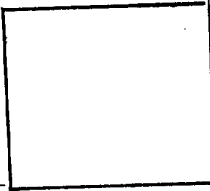


5684

Form 504  
Ed. June, 1928

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
R. S. Patton, Director



State: Alaska

DESCRIPTIVE REPORT

~~Topographic~~  
Hydrographic

Sheet No. .51 5684

LOCALITY:

Aleutian Islands

Iliuliuk Bay and Dutch Harbor

U.S.C. & G.S.S. DISCOVERER

1934

CHIEF OF PARTY

H. B. Campbell

5684

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO.

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 51

REGISTER NO. 5684

State Alaska

General locality Aleutian Islands

Locality Iliuliuk Bay and Dutch Harbor

Scale 1:5,000 Date of survey August - September 1934

Vessel U.S.C. & G.S.S. DISCOVERER

Chief of Party H.B. Campbell

Surveyed by H.O. Fortin

Protracted by J.N. Jones

Soundings penciled by J.N. Jones and M.G. Ricketts

Soundings in fathoms ~~feet~~

Plane of reference M.L.L.W.

Subdivision of wire dragged areas by

Inked by Brinkley & J Levine

Verified by J. Levine

Instructions dated April 13, 1934

Remarks:

DESCRIPTIVE REPORT

To Accompany

HYDROGRAPHIC SHEET .51 1934

U.S.C. & G.S.S. DISCOVERER

H.B. Campbell, Commanding.

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I. INSTRUCTIONS:

This survey was made in accordance with Director's Instructions dated April 13, 1934.

II SURVEY METHODS:

Usual methods of survey were used as described in the hydrographic manual.

Hand leads used were graduated in fathoms and feet. These were tested at the beginning and end of days work. No corrections are necessary.

Wire soundings were taken using sheave #240, graduated in fathoms and tenths. This sheave was tested at the beginning and end of the season and found to be correct.

Frequent checks of sextants used kept them in good adjustment.

The general spacing of lines is 50 meters in depths over 10 fathoms and 25 meters in shoaler water. Closer spacing was used when needed.

Wire soundings were taken in shoaler depths than usual in order to get better spacing of soundings and to avoid "misses" on irregular bottom. These soundings, however, were taken with due care and are as accurate as hand lead soundings could be.

In the development of a few shoals, and in a few other cases, both hand lead and machine soundings were taken on the same position. These are clearly indicated in the record books. In case of a disagreement the shoaler sounding is plotted on the smooth sheet.

From August 1st, "a" day, through August 22, "q" day, the sounding chair for hand lead soundings was shipped on the forward end of the launch. Beginning with August 23, "r" day, the chair was shipped aft. There is a difference of about 15 feet in these two positions. Since the angles were taken from the after end of the launch at all times a small correction in location of hand lead soundings of "a" through "q" day is possible. This has not been done on the smooth sheet as it is believed that it would not necessarily increase the accuracy of the sheet. Machine soundings were taken aft at all times.

Kelp limits were plotted on the boat sheet as sounding progressed. These areas are shown on the boat sheet by light green shading. Notes of kelp were made in record books, but the limits as shown on the boat sheet are more accurately plotted than is possible from these notes. All kelp not shown on the boat sheet is of sparse growth. It is recommended that the boat sheet limits be used for charting.

The topographic locations of buoys has been shown on the smooth sheet, because it is believed that these positions give a better mean location than notes in record books.

Soundings taken around docks have been plotted on sub-plans on a scale of 1 to 1,000. The docks are plotted (in the sub plans) from measurements taken by the hydrographic party supplemented by distances scaled from the topographic sheets.

### III AGREEMENT WITH FORMER SURVEYS:

For this comparison chart 9008 of January 8, 1934, was used. This issue includes surveys by the U.S. Coast Guard Cutter CHELAN.

The present survey is much more detailed and should supercede the former surveys.

The following marked discrepancies are noted:

1. The 2 1/2 fathom sounding; lat. 53° 53.57', long. 166° 30.18', is apparently charted 100 meters N.W. of its actual location. A careful investigation disproves the charted location and shows 2 2/6 fathoms 100 meters S.E. of this position.
2. The 2 3/4 fathom sounding, charted 250 meters N x E of Rocky Point was not found. Close spaced sounding sounding lines in this vicinity show from 11 to 14 fathoms. The Commanding Officer of the U.S.L.H. Tender CEDAR stated that he had frequently searched for this shoal in order to mark it and was positive it did not exist. The soundings on this sheet are sufficient to disprove this shoal.
3. The 1 3/4 fathom sounding charted 200 meters N.N.E. of Rocky Point and the 1 fathom sounding charted 250 meters N.E. of Rocky Point are both evidently soundings on the 1 fathom shoal which is located half way between these two charted soundings. Close spaced sounding lines with drift soundings disprove the charted locations.
4. Soundings by the Coast Guard charted in lat. 53° 54.4', long. 166° 30.0' of 5 fathom and 6 1/2 fathoms are evidently misplaced and the present survey should be used for charting.
5. The charted 8 fathom sounding in lat. 53° 54.5', long. 166° 30.3' falls in 20 fathoms and should be expunged.
6. The charted soundings around Spithead are in error. Soundings on the present survey should be used.
7. The charted soundings in the vicinity of 53° 52.8', long. 166° 31.2', of 11, 7, 5, and 10 fathoms fall in much deeper water. Soundings should be charted as shown on the present survey.

T-2135

See Review  
par. 7 & 8

Expunged from  
35-2/26 print on  
authority of letter  
from field party  
R/S

See Review  
par. 8 a (2)

8. The charter <sup>d</sup> 2 3/4 fathom sounding in lat. 53° 52.80', long. 166° 32.0' falls on a sounding of 3 5/6 fathoms on this sheet. This discrepancy was not noted in the field and it is recommended that further development should be made in this area.

*see Review page 8 a (1)*

9. The rocks in the south entrance to Iliuliuk Harbor, lat. 53° 52.6, long. 166° 32.8' should be charted as shown on this sheet. The high water rocks do not exist. A very careful investigation was made of this area.

*78(1)*

IV ANCHORAGES & CHANNELS:

Anchorage and channels are described in Coast Pilot Notes, 1934, by the Commanding Officer of the U.S.S. DISCOVERER.

V A list of statistics and a tidal note is appended.

VI FURTHER DEVELOPMENT NEEDED:

Further investigation should be made of the 2 3/4 fathoms mentioned in Paragraph III, section 8.

Additional development is needed in the vicinity of two soundings of 1 2/6 fathoms, 110 meters N. of signal Key. (South Amaknak Rocks).

VII NAMES:

Geographic names are covered by descriptive reports of topographic sheets A and B, 1934.

Respectfully submitted,

*James N Jones*  
J.N. Jones,  
Jr. H. & G. Engineer,  
C. & G. Survey

Approved & forwarded:


*H.B. Campbell*  
H.B. Campbell,  
Commanding,  
Ship DISCOVERER.

NOTE TO ACCOMPANY DESCRIPTIVE REPORT FOR HYDROGRAPHIC SHEET .51

For a number of years, various vessels of the U. S. Coast Guard have caused soundings to be taken in various places covered by this survey.

Last year a number of launches of the U. S. Navy were noted sounding in different places. The surveying officers on the U.S.S. OGLIALA, (flagship of 1934 U. S. Navy Aleutian Islands Survey Expedition) made a survey of the approaches to the dock at Dutch Harbor for use on that vessel.

For these and various reasons, it was thought best to make an extremely close survey. It is thought that, with the exceptions noted in the report, the soundings taken are sufficient to settle without doubt any questions that may arise.

  
H. B. Campbell, H. & G. E.,  
Chief of Party, C. & G. S.

STATISTICS FOR SHEET, FIELD NO. .51

Date	Day	Soundings		Positions	Statute Miles		Miles-Nautical		Boat
		Wire	H.L.		Wire	H.L.	To & From	Total	
Aug. 1	a	292	73	107	5.3	1.0	2.5	8.1	S.M.S.
Aug. 2	b	483	136	190	11.1	2.0	5.5	16.9	"
Aug. 3	c	664	22	228	12.5	.2	5.8	16.9	"
Aug. 4	d	280	48	107	5.8	.5	3.2	8.7	"
Aug. 6	e	495	113	195	10.8	1.6	6.9	17.7	"
Aug. 8	f	561	106	215	12.9	0.9	4.5	16.7	"
Aug. 9	g	311	470	195	6.8	5.2	7.0	17.8	"
Aug. 10	h	398	285	192	7.8	3.3	7.1	16.9	"
Aug. 13	j	177	512	184	3.0	8.3	9.2	16.4	"
Aug. 14	k	389	523	232	7.7	5.1	5.0	16.1	"
Aug. 15	l	601	90	242	12.0	1.3	2.0	13.6	"
Aug. 16	m	237	79	105	4.3	1.1	3.6	8.4	"
Aug. 20	n	458	191	226	7.8	1.9	6.4	14.9	"
Aug. 21	p	145	539	83	2.5	1.3	1.9	5.2	"
Aug. 22	q	421	346	231	6.9	4.8	3.3	13.6	"
Aug. 23	r	135	360	84	1.4	1.2	3.1	5.4	"
Aug. 24	s	349	317	219	3.5	3.0	7.0	12.7	"
Aug. 27	t	140	46	67	1.8	.3	3.1	4.9	"
Aug. 28	u	295	116	138	4.1	.7	3.3	7.5	"
Aug. 29	v	343	556	268	5.1	3.5	8.5	16.0	"
Aug. 30	w	265	372	128	2.3	1.7	5.8	9.4	"
Aug. 31	x	422	444	259	4.0	4.1	7.0	14.1	"
Sept. 4	y	18	150	31	.1	.6	2.3	3.1	"
Sept. 5	z	423	376	251	5.7	2.9	8.4	15.9	"
Sept. 6	a'	275	382	224	2.4	3.0	8.5	13.3	"
Sept. 7	b'	229	208	143	1.2	2.3	10.2	13.3	"
<b>TOTALS</b>		<b>8806</b>	<b>6880</b>	<b>4545</b>	<b>148.8</b>	<b>61.8</b>	<b>141.3</b>	<b>323.5</b>	<b>S.M.S.</b>

543



## Verification of Hydrographic sheet H-5684

The records conform to the requirements of the General Instructions. ✓

The usual depth curves can be completely drawn. ✓

The field plotting was completed to the extent prescribed in the Hydrographic Manual. ✓

Verifier had to revise field drafting such as:

- (a) Respacing of soundings to agree with recorded variations of speed. ✓
- (b) Re-plotting of positions where field draftsman used angles different from recorded angles.

No junctions were made because there are no contemporary adjoining sheets in the office at the present date. ✓

### Remarks:

Numerous references are made in the sounding records pertaining to "Fish Nets", but these references do not contain sufficient information whereby the exact locations of these nets may be shown. Verifier has shown the approximate locations in pencil. <sup>not indeed as they are assumed to be of a temporary nature</sup> RP

With respect to "Tuscarora Rock" (Lat.  $53^{\circ}52'7$ , Long.  $166^{\circ}32'1$ ) verifier could not find from the records or otherwise the exact location of this rock and has therefore left the leader in pencil. <sup>assumed to be the location of least depth, 3 fathoms</sup> There is no special chart for the U.S. L.H. Service covering this sheet. ✓

Respectfully submitted

Julius Levine

August 6, 1935

GEOGRAPHIC NAMES

Date. Mar. 16, 1935 ALASKA

Survey No. H 5684

Chart No. 8860-9007-8

Diagram No. 8860

Approved by the Division of Geographic Names, Department of Interior. ✱

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

*Names underscored in red approved H.L.F.*

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	<u>Dutch Harbor</u> ✓✓	Same			
	<u>Amaknak Island</u> ✓✓	"			
	<u>Iliuliuk Bay</u> ✓✓	"			
	<u>Spithead</u> ✓✓				
	<u>Rocky Point</u> ✓✓				
	<u>Unalaska</u> ✓✓	<del>Iliuliuk</del> * R			
	<u>Tuscarora Rk.</u> ✓✓				
	<u>Iliuliuk Reef</u> ✓✓				
	<u>Expedition I.</u> ✓✓				
	<u>Iliulkuk Harbor</u> ✓✓				
	<u>Unalaska Island</u> ✓✓	Same			
	<u>South Amaknak Rocks</u> ✓✓				
		<u>Agnes Beach</u> ✓			
		<u>Margaret Bay</u> ✓			
		<u>Pinnacle</u> <del>Beach</del> ✓			
		<i>(See Geographic Names Standard)</i>			
	<i>Enter the name Iliuliuk and also Unalaska P.O. pending a reconsideration of this name by the D.G.N.</i>				

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 5684

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	4545
Number of positions checked	162
Number of positions revised	17
Number of soundings recorded	15686
Number of soundings revised	121
Number of signals erroneously plotted or transferred	0

Date: August 6, 1935

Verification by J. Levine

Review by R. J. Christman

Time: 28 hrs. Brinkley (inking) } Total  
234 hrs. Levine (ver. & ink) } 262 hrs.  
Time: Rev. 16 1/2 hr.  
Cor. 1 hr.

May 5, 1935.

Division of Hydrography and Topography:

✓ Division of Charts: Attention: Mr. E. P. Ellis

Tide Reducers are approved in  
16 volumes of sounding records for

HYDROGRAPHIC SHEET 5684

Locality Iliuliuk Bay and Dutch Harbor, Southwest Alaska.

Chief of Party: H. B. Campbell in 1934  
Plane of reference is mean lower low water, reading  
5.8 ft. on tide staff at Unalaska  
4.8 ft. below B.M. 1  
  
3.7 ft. on tide staff at Dutch Harbor  
12.5 ft. below B. M. 1

Height of mean higher high water above plane of reference is 3.7 feet.

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5684 (1934) FIELD NO. 0.51

Iliuliuk Bay and Dutch Harbor, Aleutian Islands, Alaska

Surveyed in Aug. - Sept. 1934

Instructions dated April 13, 1934 (DISCOVERER)

Hand Lead and Machine Soundings.

3 Point Fixes on shore signals.

Chief of Party - H. B. Campbell.

Surveyed by - H. O. Fortin.

Protracted by - J. N. Jones.

Soundings penciled by - J. N. Jones and M. G. Ricketts.

Verified and inked by - J. Levine and Brinkley.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual except that position numbers and day letters were not shown in color on cover and title page of sounding records. No confusion results as only one boat (SMS) was used in the work.

The Descriptive Report is complete and satisfactorily covers the items of importance.

The duplicate copy of the chart for the Lighthouse Service showing objects for the location of floating aids to navigation has not been received (Circular letter Nov. 30, 1933).

2. Compliance with Instructions for the Project.

In general the survey is an exceptionally well developed one and fully complies with the instructions for the project. However, a more detailed investigation should have been made of the 4-2/6 fathom shoal in latitude 53° 52.49', longitude 166° 32.85'. The present chart shows 3-1/2 fathoms on this shoal from Coast Guard information (see par. 8a (6) of this review.)

Developed. Two  
3/6 fm. depths  
found. See Rev.  
(Par. B) of  
H-5684(1937)Ad.wk.  
H.w.M. 12/3/37

3. Shoreline and Signals.

The shoreline originates with planetable surveys T-4888 and T-4889 of 1934.

Signals are from 1934 triangulation and from the above topographic sheets.

4. Sounding Line Crossings.

No special cross lines were run but soundings on crossing lines resulting from development work are consistent. Also soundings on adjacent lines are in agreement.

5. Depth Curves.

Within the limits of the survey the usual depth curves may be satisfactorily drawn.

6. Junction with Contemporary Surveys.

No contemporary surveys joining this sheet have been received at this time.

7. Comparison with Prior Surveys.a. T-1950 (1867).

The soundings on this survey, scale 1:40,000, are from Russian Authorities. The plane of reference for the soundings is not given on the survey. However, some of the soundings are in use on the present charts. They should be superseded by the present survey for future charting purposes.

b. T-2135 (1871-2), T-2135a (1871-2) (Contain Hydrography).

These surveys, scale 1:5,000 and 1:20,000, respectively, are generally in fair agreement with the present survey. Differences in details, especially near shore, are mostly due to the weak control of the sounding lines of the older survey. This accounts for the discrepancies noted in par. 1, 2, 3 and 7, page 3 of the Descriptive Report. The present survey being on large scale and showing close development should supersede both surveys for future charting. Some of the more important differences noted are the following:

1. The bare rocks (charted) in latitude  $53^{\circ} 52.6'$ , longitude  $166^{\circ} 32.8'$ , are derived from T-2135 (1871-2) where they are shown from a topographic location. No clear bare outline is shown and the representation may have been intended for reefs only. The present survey shows two rocks awash at MLLW in this location and the field party makes a definite statement that no bare rocks exist in this vicinity. (See par. 9 page 4 of the Descriptive Report). The bare rocks should be omitted in future charting.
2. The bare rocks (charted) on the east shore of Iliuliuk Bay in the vicinity of latitude  $53^{\circ} 53'$ , and southward, come from T-2135a (1871-2). The present survey does not show any such features but does show several rocks awash along this shore. It is possibly a misinterpretation of the symbols used on the older survey.
3. The detached  $2\frac{1}{2}$  fathom (charted) in latitude  $53^{\circ} 53.55'$ , longitude  $166^{\circ} 30.20'$ , is shown as  $2\frac{2}{3}$  on T-2135a (1871-2). The present survey shows a 3 fathom sounding

about 60 meters northeast of this location. Because of the small scale and weak control of the older survey, the 2-1/2 fathom sounding should not be retained on the chart.

4. The 2 fathom (charted) in latitude  $53^{\circ} 52.65'$ , longitude  $166^{\circ} 32.92'$ , is from a line of soundings on T-2135 (1871-2) that falls in much deeper water on the present survey. The line of soundings is evidently out of position and should not be retained in charting.

c. H-3701 (1914), H-3701a (1915).

These surveys, scale 1:2,000 show a partial development of Tuscarora Rock in the entrance to Iliuliuk Harbor. The location of the least depth (3 fathoms) is in agreement with the present survey. Although details on the present survey are adequate for charting purposes the above surveys may be retained as supplementary information.

8. Comparison with Chart 9008 (corrected to Feb. 26, 1935).

a. Hydrography.

Within the area of the present survey the chart is based on the surveys discussed in the foregoing paragraphs and on surveys made by officers of the Coast Guard Cutter CHELAN in 1933 (blue prints 27236 to 27239). The history of the chart shows that some soundings have been retained from Russian Authorities and from H. O. chart 2541, but no copies of these charts are available for comparison. Some of the more important differences are the following:

1. The 2-3/4 fathom sounding (charted) in latitude  $53^{\circ} 52.80'$ , longitude  $166^{\circ} 32.00'$  comes from blue print 27238 (1933). Other soundings in the vicinity are in agreement with the present survey which shows 3-5/6 fathoms at this place and this sounding (2-3/4 fathoms) should be retained on the chart until further investigation has been made. (See Descriptive Report, page 4, par. 6).
2. The 5 fathom (charted) in latitude  $53^{\circ} 54.5'$ , longitude  $166^{\circ} 30.0'$ , falls in depths of 6-4/6 fathoms on the present survey and is first shown on the 1934 edition of the chart, which embodies the surveys of the Coast Guard Cutter "CHELAN". However, the 5 does not appear on the photostat copy of that survey (blue print 27239) and no other authority for it could be found. The representation on the present survey should be used for charting this area. (See par. 4 page 3 of the D. R.).

3. The source of the 8 fathom (charted) in latitude  $53^{\circ} 54.5'$ , longitude  $166^{\circ} 30.8'$  and of the soundings around Spithead was not determined. The present survey adequately disproves them and the representation on H-5684 (1934) should be used in future charting. (See pars. 5 and 6, page 3 of the Descriptive Report).
4. The wreck (charted) in latitude  $53^{\circ} 53.2'$ , longitude  $166^{\circ} 30.65'$ , comes from T-2236a (1908) where it is noted as a "Wreck of barge". The present survey does not mention this wreck, and because of the elapsed time it is assumed that it has entirely disintegrated. It should be expunged from the chart.
5. The  $2\text{-}1/4$  fathom soundings (charted) latitude  $53^{\circ} 52.65'$  longitude  $166^{\circ} 32.85'$  come from blue print 27236 (1933). The present survey shows 3 fathoms in this place with  $1\text{-}5/6$  fathoms about 15 meters S by E of it. The blue print does not indicate the nature of the control used in this hydrography and as there is considerable discrepancy in shoreline and similar features it is not deemed advisable to retain these soundings on the chart but the representation on the present survey should be accepted.
6. The  $3\text{-}1/2$  fathom (charted) latitude  $53^{\circ} 52.49'$ , longitude  $166^{\circ} 32.85'$ , also comes from blue print 27236 (1933) but as it falls near a  $4\text{-}2/6$  fathom on the present survey that has not been fully developed and other soundings in the vicinity are in agreement, the  $3\text{-}1/2$  fathom should be retained as the least water on this shoal.
7. The 4, 3 and 5 fathom soundings (charted) in approximate latitude  $53^{\circ} 52.1'$ , longitude  $166^{\circ} 33.2'$  come from blue print 27240 (1933). The survey appears to be in the nature of a reconnaissance only and the representation on the present survey should be accepted for future charting purposes.

Developed.  
Two 3 1/2 fathoms  
depths found.  
See Rev.  
(Par. 3) of  
H-5684 (1937)  
Ad. wk.  
W. W. M. 12/1/37

*This applies with equal force to the two soundings  
7+9 about 150 meters south of S. Amiaknak Rock  
S.B.M.*

b. Aids to Navigation.

The lighted buoy on Tuscarora Rock, latitude  $53^{\circ} 52.73'$ , longitude  $166^{\circ} 32.10'$ , is charted 30 meters east of the position given by the survey, thereby placing it on the opposite side of the least depth on this rock, but just as well for entering Iliuliuk Harbor. The other buoys are charted in practically the positions as located on the present survey.

9. Field Plotting.

The field plotting was good. The verifier revised some 17 positions and respaced 121 soundings out of over 15,000 soundings in the records of this sheet.



10. Additional Field Work Recommended.

- a. A development of the 4-2/6 fathom rocky shoal (kelp marked) in latitude 53° 52.49', longitude 166° 32.85'. While 25 meter lines were run in this area, no drift soundings were taken. The Coast Guard Cutter "CHELAN" found a 3-1/2 fathom shoal in this area. (See par. 8a (6) of this review).
- b. The additional work recommended by the field party on the 2-3/4 fathom sounding in latitude 53° 52.80', longitude 166° 32.00', (see par. 8a 1 above) and the shoal area (1-2/6 fathoms) in latitude 53° 52.0', longitude 166° 33.4', while not considered of great importance should be accomplished when the work called for in par. 10a is done. In addition the 1-4/6 fathom shoal about 100 meters to the westward of the above mentioned 1-2/6 fathoms should also be developed.

Developed. Two  
3 3/4 fm. depths  
found. See Rev.  
(Par. B) of  
H-5684 (1937) Ad.  
wk.  
U.W.M. 12/3/37

11. Superseding Old Surveys.

Within the area covered the present survey supersedes the following surveys for charting purposes:

T-1950 (1867) in part  
T-2135 (1871-2) entirely  
T-2135a (1871-2) "

12. Reviewed by - R. J. Christman, October 14, 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

C. K. Green, *C. K. Green*  
Chief, Section of Field Records.

*K.T. Adams*  
Acting Chief, Division of Charts.

*F.S. Borden*  
Chief, Section of Field Work.

*G. Hude*  
Chief, Division of H. & T.

25 June, 1936  
S.B.M.

*dated May 5, 1936*

Applied to drawing of Chart No. 9008 April 1936 S.B.M.  
~~Applied to drawing of Chart No. 9007 " " S.B.M.~~  
Applied to new compilation of chart no. 9007 July 1936 S.B.M.

Applied to drawing of chart No. 8860 Dec 1936 S.B. Maize

Applied to drawing of Chart No. 8802 S.B. Maize June 1937

Applied to new compilation of Chart No. 9007 (extended) S.B. Aug. 1938

5684

(Addl. Wk. 1937)

(Addl. Wk. 1937)

5684

Form 504  
Rev. Dec. 1933  
DEPARTMENT OF COMMERCE  
U.S. COAST AND GEODETIC SURVEY  
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. H-5684 (Addl. Wk. 1937)  
Hydrographic }

State Alaska

LOCALITY

Aleutian Islands

Iliukin Bay and Dutch Harbor

1937

CHIEF OF PARTY

A. M. Sobiralski

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY  
LIBRARY AND ARCHIVES  
OCT 26 1937  
REG. NO.  
Acc. No.

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. ~~H-5684~~ <sup>H5684</sup> Additional Work, 1937

REGISTER NO.

State ALASKA

General locality ALEUTIAN ISLANDS

Locality ~~UNALASKA, ALASKA~~ ILLIULIUK HARBOR

Scale 1:5,000 Date of survey Sept. 19, 1937

Vessel U.S.C.&G.S.S. SURVEYOR

Chief of Party A. M. SOBIERALSKI

Surveyed by JAMES D. THURMOND

Protracted by JAMES D. THURMOND

Soundings penciled by JAMES D. THURMOND

Soundings in fathoms feet

Plane of reference DUTCH HARBOR, ALASKA

Subdivision of wire dragged areas by

Inked by G.H. Everett

Verified by G.H. Everett

Instructions dated Aug. 17, 1937, 19

Remarks:

DESCRIPTIVE REPORT TO ACCOMPANY

ADDITIONAL WORK 1937

SHEET ~~H-5864~~

H5684

DATE OF INSTRUCTIONS

1. The work was executed in accordance with the Director's instructions dated Aug. 17, 1937, reference 22-AB, 1995 SU4, to investigate a shoal in the southern entrance of Unalaska Harbor.

METHOD OF WORK

2. On arrival in Dutch Harbor, September 17th, the photostat for doing the work had not arrived and on September 18th a hydrographic party made a preliminary examination of the area in question, and is recorded in the record book as "a" day. However these positions were not used, as a thorough examination was made the next day, on arrival of the photostat. Enough of the old signals were recoverable from the old survey to use in getting fixes.

3. The hydrographic survey was done with the motor sailor, the soundings being taken with a hand lead, and the fixes were taken in the fore part of the launch, with the observers standing alongside the leadsman. The sounding was done at odd intervals, with the launch drifting back and forth over the area in question, and fixes being taken on least depths obtained.

RESULTS OBTAINED

4. Two soundings that reduced to 3 fathoms and 4 feet were obtained, and are probably on the same rock, although they are 20 meters apart, but the bottom being uneven, it is probable that they are more or less pinnacle in shape, for we would drift off them in a very short space of time into deeper water. Both of the least depths have one streamer of kelp growing on them, but at high tide are not visible or when the current is running, being towed under them.

5. I believe that these two soundings are the least depths to be obtained in this area as we felt thoroughly all over the area besides the recorded soundings of least depths.

6. The sounding of  $3\frac{1}{2}$  fathoms obtained by the Coast Guard is about one foot shoaler than this depth, but the plane of reference for tidal observations used by them could not have been well determined and may account for the difference

Forwarded:

*A. M. Sobieralski*  
A. M. SOBIERALSKI  
Cmd'g. SURVEYOR

*James D. Thurmond*  
James D. Thurmond,

Jr. H.&G.E.

U.S.C.&G.S.S. SURVEYOR

Report on Verification of H-5684 (Add'l. Work)

The location of the additional work is at Lat.  $53^{\circ} 52.5'$ ,  
Long.  $166^{\circ} 32.8'$  and is shown in red soundings. ✓

The records conform to the general requirements. ✓

There is no boat sheet accompanying the records. If  
a boat sheet was used, it was probably the photostat  
mentioned in the D.R. which was not returned to the office. ✓

The plotting of the soundings on the original  
smooth sheet H-5684 (1934) was done in the  
office. ✓

Submitted Nov. 29, 1937

*J. Everett*

CS-11-18-37

Form 712  
DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY  
Ed. Feb. 1935

**TIDE NOTE FOR HYDROGRAPHIC SHEET**

November 18, 1937.

Division of Hydrography and Topography:

✓ Division of Charts: Attention: Mr. E. P. Ellis.

Tide Reducers are approved in  
1 volumes of sounding records for

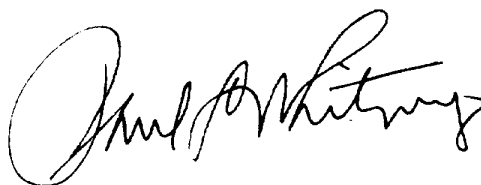
HYDROGRAPHIC SHEET 5684 Add'l Wk. 1937

Locality Iliuk Bay and Lost Harbor, Southern Entrance, Unalaska Harbor

Chief of Party: A. M. Sobieralski in 1937  
Plane of reference is mean lower low water reading  
3.7 ft. on tide staff at Dutch Harbor  
12.6 ft. below B.M. 1

Height of mean high water above plane of reference is 3.4 feet.

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents.

Field Records Section (Charts)

H5684 (Addl. Wk. 1937)  
HYDROGRAPHIC SHEET NO. ....

The following statistics will be submitted with the  
cartographer's report on the sheet:

Number of positions on sheet	...47...
Number of positions checked	...47...
Number of positions revised	.....
Number of soundings recorded	...47...
Number of soundings revised	.....
Number of signals erroneously plotted or transferred	.....

Date:

Verification by *G.H. Everett*

Time: *5 hrs*

Review by *H.W. Murray*

Time: *2 "*



HYDROGRAPHIC SURVEY NO. H5684 (Addl. Wk. 1937)

Smooth Sheet Original One.

Boat Sheet Original One (Additional work on two tracings)

Destroyed by Reviewer.  
Purpose fulfilled.

Sounding Records One volume Vols. \_\_\_\_\_

Descriptive Report Yes

Title Sheet Yes

List of Signals Old signals used

Landmarks for Charts (Form 567) None

Statistics None

Approved by Chief of Party None

Recoverable Station Cards (Form 524) None

Special Chart for Lighthouse Service None  
(Circular Nov. 30, 1933)

Remarks HYDROGRAPHY

Total Days One.....

Last Date Sept. 19, 1937

# MEMORANDUM

## IMMEDIATE ATTENTION

SURVEY DESCRIPTIVE REPORT <del>PHOTOSTAT OF</del>	}	No. H -5684 (Addl. Wk. 1937) <del>No. 1</del>	{	received Oct. 26, 1937 registered Nov. 9, 1937 verified reviewed approved
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This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
✓ 22	<i>FL Peacock</i>	<i>JPP</i>	
24			
✓ 25		<i>JPP</i>	
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	C. K. Green
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Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5684 (1937) Ad. Work, FIELD NO. H-5684 (1937)  
Add. Work.

Iliuliuk Harbor, Aleutian Islands, Alaska  
Surveyed in Sept. 1937, Scale 1:5,000  
Instructions dated Aug. 17, 1937 (SURVEYOR)

Hand Lead Soundings.

3 Point fixes on shore signals.

Chief of Party - A. M. Sobieralski.  
Surveyed by - James D. Thurmond.  
Protracted by - James D. Thurmond.  
Soundings plotted by - J. D. Thurmond.  
Verified and Inked by - G. H. Everett.

A. Purpose of Additional Work.

The purpose of this additional work was to develop a 4-2/6 fathom rocky shoal in latitude 53° 52.49', longitude 166° 32.85', called for in paragraph 10a of the review of H-5684 (1934), on which the Coast Guard Cutter "CHELAN" found a 3-1/2 fathom depth. These soundings are discussed in paragraphs 2 and 8a(6) of the review of H-5684 (1934).

B. Results of Additional Work.

Development of the 4-2/6 fathoms on the 1934 work disclosed two ~~least~~ depths of 3-4/6 fathoms (for details of bottom, see Descriptive Report, par. 4). Considering the uncertainty of the Coast Guard's tidal plane of reference, the least depth of 3-4/6 fathoms is considered a close enough verification of the Coast Guard's 3-1/2 fathoms and should supersede the latter in future charting. (See also par. 5 of Descriptive Report).

Reviewed by - Harold W. Murray, December 3, 1937.

Inspected by - A. L. Shalowitz.

Examined and approved:

C. K. Green, *C. K. Green*  
Chief, Section of Field Records

*L. O. Gilbert*  
Chief, Division of Charts.

*Fred. L. Peacock*  
Chief, Section of Field Work.

*G. H. Everett*  
Chief, Division of H. & T.