3668

3668a

Diag. Cht. No. 1210-2

Department of Commerce and Labor

COAST AND GEODETIC SURVEY

O. H. Tittmann

Superintendent.

State: Maine

DESCRIPTIVE REPORT.

Hydr. *Sheet No.* 3668

LOCALITY:

Buzzards Bay

1914

CHIEF OF PARTY:

J. S. Hawley

11—4645

3668

DEPARTMENT OF COMMERCE
U.S.COAST AND GEODETIC SURVEY
O.H.Tittmann, Superintendent

Hyd. 3668

MASSACHUSETTS

ENTRANCE TO BUZZARDS BAY

Survey with Wire Drag

June 27 ------ September 29

1914

Jean H.Hawley, Ass't. Chief of Party

WIRE DRAG PARTY NO. 2.

OFFICERS

J.H.Hawley, Assistant	-----	Chief of Party.
Ernest W. Eickelberg, Aid	-----	Executive Officer.
Harold H.Griffin, D.O.: S.Davis Winship, D.O. :	-----	In charge end launch.
Spencer Danby, D.O. : William K.Doolittle, Aid:	-----	Observing.
Leonard H. Zeman, D.O.	-----	In charge sounding tender.

STATISTICS
Hydrographic Sheet No. 3668.

DAY	DATE	LENGTH OF DRAG	MILES statute	POSITIONS	SOUNDINGS
A	June 25	2400 ft.	2.5	12	--
B	" 26	2400	5.8	47	--
C	" 29	2400	4.0	29	7
D	July 1	3000	0.25	4	2
E	" 3	3000	2.25	20	2
F	" 6	3000	1.5	15	3
G	" 13	3000	4.25	42	4
H	" 24	3000	1.25	13	4
J	" 27	3000	5.75	46	3
K	" 29	3000	0.50	8	1
L	" 31	3000	4.50	59	1
M	Aug. 4	3000	- --	2	--
N	" 6	3000	3.75	37	3
O	" 10	3000	3.0	21	--
P	" 13	2400	8.50	60	1
Q	" 14	3000	2.50	27	6
R	" 17	3000	2.0	21	--
S	" 25	4000	4.0	41	2
T	" 26	4000	6.25	60	1
U	" 27	3000	7.75	59	1
V	" 28	3000	7.50	63	3
W	" 31	3000	4.5	40	1
X	Sept 3	3000	0.5	4	--
Y	" 4	3000	5.5	34	--
Z	" 5	4000	6.0	37	1
A'	" 9	3000	5.75	52	4
B'	" 10	3000	5.75	38	--
C'	" 11	4000	8.5	54	1
D'	" 12	3000	6.25	50	--
E'	" 17	3000	4.75	42	6
F'	" 18	3000	5.25	49	4
G'	" 21	3000	3.25	26	1
H'	" 22	3000	4.25	42	1
J'	" 28	3000	5.25	41	1
K'	" 29	2100	1.75	11	--

SUMMARY

NO. MILES(statute) --- 145.08
NO. POSITIONS --- 1206
NO. SOUNDINGS --- 64
AREA(sq. stat. miles)--- 47.5

TIDES

WESTPORT HARBOR

June 19 -- Sept. 29, 1914.

	Staff Reading
Mean Low Water -------	1.61 feet
Lowest Water Observed ------	1.10 "
Highest Water Observed ------	5.95 "

The usual methods for wire drag work were followed on this sheet.

The minimum length of drag used was 2100 feet and the maximum 4000 feet.

The drag depth was frequently tested and gave values for lift somewhat less than those commonly used.

The work was plotted on the sheet in the field by members of the party.

Numerous changes in charted depths were found and reported.

The positions of all soundings are inked on the sheet and the soundings entered in pencil.

Respectfully submitted,

Assistant C.& G.Survey,

Chief of Party.

VEC
Oct.21,1914

HYDROGRAPHIC SHEETS 3668 & 3668a.

Approaches to Buzzards Bay, Massachusetts by Assistant J. H. Hawley in 1914.

TIDES.

	Westport Harbor ft.
Mean low water, or plane of reference on staff	1.6
Lowest tide observed " "	1.1
Highest " " " "	6.0
Mean range of tide	3.1

Myd c 3668.

The drag covered an area at the Entrance to Buzzards Bay, Mass.

The work was plotted in the field, verified in the office and finally a tracing made, which shows the max. eff. depth in feet, to which the partial areas have been dragged.

A few inaccuracies in plotting were noticed, of which the following may be mentioned:

The positions of the soundings $^{1}/_{N}$ & $^{2}/_{N}$ were interchanged.

Day "A". All distances originally correctly computed were erroneously changed by the checker, who, evidently, used a length of tow line of 60 fm. instead of 61 fm. as recorded.

A number of positions were not accurately plotted, e.g. $^{27}/_{C}$, $^{11}/_{F}$, $^{13}/_{G}$, $^{1}/_{H}$.

Day "P". At $^{4}/_{P}$ 'F' to '4' were changed to 33' and the tow line changed to 61 fm. These sections remained at a depth over 30 ft. up to position 23 P., and to be consistent the tow line used should have remained 61 fm., but at $^{13}/_{P}$ in computing distances a 62 fm. tow line was used.

Day "W". At $^{1}/_{W}$ sections 2 to 6 were set at 32'; plotted "4' to "9".

From $^{18}/_{W}$ to $^{28}/_{W}$ the "F" end positions were numbered in place of the "N" end.

At $^{23}/_{W}$ "N" to "F" were changed to 43'. Plotted "F" to "N". This error is probably due to the wrong numbering of the ends of the drag.

At 29 Vw "N" to "3" were changed to 37' while 4 to F remained at 43'. Plotted "N" to "F" - 37'.

Shoal 2F (26 ft.) was passed by a drag at 28'

Shoals 3A', 4A' (37' and 37') were passed by a drag at 41 feet.

At 22' a 20' drag struck a 22' spot. The chief of the party reports that the tenders were unable to locate less than the 22' sounded at 1H'. By recommendation of Mr. G. L. Flower this shoal is to be charted 20 feet.

A few splits have been left open and are indicated on the tracing by arrows.

The records throughout the work were kept in good shape.

J. B. McKean

June 22-15.

3668a

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

O. H. Tittmann
Superintendent.

State: Mass.

DESCRIPTIVE REPORT.

Hyd. *Sheet No.* 3668a

LOCALITY:

Buzzards Bay

1914

CHIEF OF PARTY:

J. A. Hawley

11—4645

3668a

Hyd. 3668-a

DEPARTMENT OF COMMERCE
U.S.COAST AND GEODETIC SURVEY
O.H.Tittmann, Superintendent

MASSACHUSETTS

ENTRANCE TO BUZZARDS BAY

Browns Ledges

Survey with Wire Drag

September 15 -16

1914

Jean H. Hawley, Ass't., Chief of Party.

WIRE DRAG PARTY NO. 2

OFFICERS

J. H. Hawley, Assistant	-------	Chief of Party.
Ernest W. Eickelberg, Aid	-------	Executive Officer.
S. Davis Winship, D.O.	-------	In charge, end launch.
Spencer Danby, D.O.	-------	Observing.
Leonard H. Zeman, D.O.	-------	In charge, sounding tender.

STATISTICS

Hydrographic Sheet No. 3668a.

DAY	DATE	LENGTH OF DRAG	MILES statute	POSITIONS	SOUNDINGS
A	Sept 15	3300 ft.	6.5	50	6
B	" 16	3300 ft.	7.75	45	-

SUMMARY

MILES (statute)	14.25
POSITIONS	95
SOUNDINGS	6
AREA (sq.stat.miles)	5

DESCRIPTIVE REPORT WIRE DRAG SHEET 3668 A.

The area shown dragged on this sheet covers the approach to Buzzards Bay in the vicinity of Browns Ledge. The southern and western limits connect with the drag-work shown on Field Sheet #2. The northern limit is represented by latitude 41° 25' ; the eastern limit by longitude 71° 03' W., and connects with drag work done by Mr.J.H. Hawley in 1914. The southeastern part shown covers Browns Ledge and was done by Mr.J.H.Hawley during the season of 1914; this work is represented by the A & B days drawn in blue ink.

The attempt was made to drag between depths of 50 & 60 feet north of latitude 41° 23'; south of that latitude the drag was set at depths between 60 & 70 feet. Mr. Hawley in dragging over Browns Ledge used depths varying between 30 & 40 feet.

The signals used in the control of this work were based on triangulation done in previous years and also by this party. Signals Doc, Hit, & Cor were located by this party. Signal Hen was located by sextant angles taken by this party.

A split occurs at about latitude 41° 23' 50" and longitude 71° 08' 50". There is a question however as to whether this split was not covered on F day. Shortly after position 18 F the far buoy fouled on the 38 ft. pinnacle rock plotted at sounding position 1 N soundings in this vicinity on this day failed to reveal any shoal spots and the far buoy was accordingly cleared and the drag-work continued. There is but slight doubt but that at position 20 F the drag was curved so as to extend to the west of the split and to the east of the pinnacle rock; in such a case as the drag proceeded east ward, the split was covered. However due to the fact that there is an element of uncertainty here, it has been thought best to consider this as a split. Another split occurs at about latitude 41° 23' 40" and longitude 71° 03' 50". This was due to incorrect plotting of the surrounding positions on the boat sheet, as that sheet shows that this spot had been covered satisfactorily.

A 57 foot shoal spot was found at about latitude 41° 24' 26" and longitude 71° 09* 19" , the chart shows 66 feet in this vicinity.

A 53 foot shoal was located at latitude 41° 23' 20", longitude 71° 09' 38" where the chart shows 76 feet.

A 53 foot rock was found at about latitude 41° 23' 10", longitude 71° 09' 50" where the chart shows 66 feet.

At about latitude 41° 24' 05", longitude 71° 08' 56" a sounding of 38 feet brought to light a pinnacle rock, measuring, as near as could be judged 10 feet by 20 feet on top, and surrounded on all sides by depths of 78 feet. Various attempts were made to drag over this spot, each time without success, and no sounding taken in this vicinity showed less than the depth at which the drag was set. It was only after much perseverence and patience on the part of the officers

in charge of the sounding launch that the rock was finally discovered.

At about latitude 41° 23' 55", longitude 71° 07' 24" a ledge of least depth of 54 feet was discovered where the chart shows 72 feet.

At about longitude 71° 07' 22" and extending from latitude 41° 24' 10" to 41° 24' 17" a ledge was found with a minimum depth of 55 feet. The chart shows 66 feet in this vicinity.

At about latitude 41° ~~25~~ 23 (A.E) 55", longitude 71° 04' 30" a boulder group of 51 feet least depth was found where 66 feet was charted.

At about longitude 71° 02' 56" and latitude 41° 24' 36" a sounding of 41 feet was obtained where 66 feet was charted.

At latitude 41° 25' 08", longitude 71° 08' 19" a shoal of least depth 50 feet rocky bottom was found where 54 feet was charted.

The tidal reduction for this work was obtained from observations made on a tide staff erected on the dock at Sakonnet Harbor.

No attempts were made to determine the strength and the direction of the currents in this area due to lack of time to spare from drag work.

Respectfully submitted

(Signed) H. W. Hemple

Deck Officer.

Approved

Jr. H. & G. Engineer,
Chief of Party.

3668 A

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

E. Lester Jones
Superintendent.

State: R.I. & Mass.

DESCRIPTIVE REPORT.

Wire Drag
Hydrographic *Sheet No.* 3668a

LOCALITY:

Approach to Buzzards Bay

Scale 1 to 30,000

1917.

CHIEF OF PARTY:

R.P.Strough

11—4645

Department of Commerce. Hyd. 3668-a

Coast & Geodetic Survey.

E. Lester Jones, Superintendent.

Rhode Island & Massachusetts

Approach to Buzzards Bay

a descriptive Report to accompany

Wire Drag Sheet 3668 A

Scale 1 to 30,000

1917

R. P. Strough,

Jr. H. & G. Engineer,

Chief of Party.

Wire Drag Party #2

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 588

PROGRESS CHART

SHOWING CONDITION OF RECORDS OF

Hydrographic Sheet No. 3668a Field No. .....

Wire drag survey of Browns Ledge and Westward

Scale 1:30,000 Date of Survey 1914 & 1917

Surveyed by J. H. Hawley and R. P. Stroughs.

Day	DATE	Signaled angles compared	Distances entered	Distances checked	Length of upright entered	Length of upright checked	Correction entered	Correction checked	Drag depth entered	Drag depth checked	Reducers entered	Reducers checked	Effective depth entered	Effective depth checked	Effective depth diagram entered	Effective depth diagram checked	Positions plotted	Dragged strip traced	Tracing checked	Area subdivided	Subdivision checked	Transferred and inked	Compared with chart
A	May 7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
B	" 8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
C	" 21	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
O	June 29	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
E	July 12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
F	Aug 6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
G	" 14	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
H	" 15	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
J	" 18	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
K	" 25	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
L	" 27	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
M	" 28	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
N	Aug 29	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
O	Sep 5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

This Progress Chart, checked to show the condition of the office work, should be forwarded to the office with the records.

11—6061

Descriptive Report Sheet 3668A

The area shown dragged on this sheet covers the approach to Buzzards Bay in the vicinity of Browns Ledge. The southern and western limits connect with the drag-work shown on Field Sheet #2. The northern limit is represented by latitude 41° 25', the eastern limit by longitude 71° 03' W. The southeastern part shown covers Browns Ledge and was done by Mr. J. H. Hawley during the season of 1914; this work is represented by the A & B days drawn in blue ink.

The attempt was made to drag between depths of 50 & 60 feet north of latitude 41° 23'; south of that latitude the drag was set at depths between 60 & 70 feet. Mr. Hawley in dragging over Browns Ledge used depths varying between 30 & 40 feet.

The signals used in the control of this work were based on triangulation done in previous years and also by this party. Signals Dole, Hit, & Car were located by this party. Signal Ken was located by sextant angles taken by this party.

A split occurs at about latitude 41°-23'-50" and longitude 71°-08'-50". There is a question however as to whether this split was not covered on F day. Shortly after position 18F the bar buoy fouled on the 38 ft pinnacle rock plotted at sounding position 1N. Soundings in this vicinity on this day failed to reveal any shoal spots and the buoy was accordingly cleared and the drag-work continued. There is but slight doubt but that at position 20F the drag was curved so as to extend to the west of the split and to the east of the pinnacle rock; in such a case as the drag proceeded eastward, the split was covered. However due to the fact that there is an element of uncertainty here, it has been thought best to consider this as a split.

another split occurs at about latitude 41°-23'-40" and longitude 71°-03'-50". This was due to incorrect plotting of the surrounding positions on the boat sheet, as that sheet shows that this spot had been covered satisfactorily.

~~[illegible]~~

A 57 foot shoal spot was found at about latitude 41°-24'-26" and longitude 71°-09'-19". ~~where~~ the chart shows 66 feet in this vicinity.

A 53 foot shoal was located at latitude 41°-23'-20", longitude 71°-09'-38" where the chart shows 76 feet.

A 53 foot rock was found at about latitude 41°-23'-10", longitude 71°-09'-50" where the chart shows 66 feet.

At about latitude 41°-24'-5", longitude 71°-08'-56" a sounding of 38 feet brought to light a pinnacle rock, measuring, as near as could be judged 10 feet by 20 feet on top, and surrounded on all sides by depths of 78 feet. Various attempts were made to drag over this spot, each time without success; and no sounding taken in this vicinity showed less than the depth at which the drag was set. It was only after much perseverance and patience on the part of the officers in charge of the sounding launch that the rock was finally discovered.

At about latitude 41°-23'-55", longitude 71°-07'-24" a ledge of least depth of 54 feet was discovered where the chart shows ~~60~~ 72 feet.

At about longitude 71°-07'-22" and extending from latitudes 41°-24'-10" to 41°-24'-17" a ledge was found with a minimum depth of 55 feet. The chart shows 66 feet in this vicinity

at about latitude 41°-23'-55" longitude 71°-04'-30" a boulder group of 51 feet least depth was found where 66 feet was charted

at about longitude 71°-02'-56" and latitude 41°-24'-36" a sounding of 41 feet was obtained where 66 feet was charted

at latitude 41°-25'-08"- longitude 71°-08'-19" a shoal of least depth 50 feet rocky bottom was found where 54 feet was charted

The tidal reduction for this work was obtained from observations made on a tide staff erected on the dock at Pakonnet Harbor

no attempts were made to determine the strength and the direction of the currents in this area due to lack of time to ~~delay~~ from drag work

Respectfully submitted

H. W. Hemple

Deck officer

Approved

J. H. & G. Engineer,

Chief of Party.

Statistics 3168A

Day	Date	Length of Drag	Miles Statute	Positions	Soundings
A	May 4, 1917	5000	0.5	11	1
B	May 8, 1917	5000	6.6	46	0
C	May 21, 1917	6000	3.0	27	2
D	June 29, 1917	5000	1.2	8	2
E	July 12, 1917	6000	5.0	33	2
F	Aug. 6, 1917	5000	3.8	31	2
G	Aug 14, 1917	5000	4.6	34	2
H	Aug. 15, 1917	6000	2.5	19	1
J	Aug 18, 1917	5500	4.1	36	1
K	Aug. 25, 1917	5000	3.6	25	0
L	Aug 27, 1917	5000	4.5	37	0
M	Aug. 28, 1917	5000	1.0	7	0
N	Aug. 29, 1917	4000	6.2	36	1
O	Sept. 5, 1917	4000	6.5	38	1
		Total	53.1	388	15

~~Respectfully submitted,~~

~~Deck Officer~~

~~[illegible]~~

~~Approved:~~

~~[illegible] Chief of Party~~

HYDROGRAPHY ETC., (HT) J.S.S.J.

CHARTS (H)

ADDRESS
U. S. COAST AND GEODETIC SURVEY
WASHINGTON, D. C.

REFER TO No. 5-VEC

LIBRARY

Place with descriptive report of hydrographic sheet No. 3668

Drawing Section,

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON

April 9, 1918.

Division of Hydrography and Topography: HCH

Division of Charts:

Tidal reductions have been approved in
4 volumes of Soundings and Wire-Drag record for

HYDROGRAPHIC SHEET 3668a

Approaches to Narragansett Bay, R.I.
R. P. Strough, 1917

Plane of reference is
Mean low water, reading

0.7 ft. on tide staff at Sakonnet ~~Point~~, R.I.

L. P. Shidy

Acting Chief, Section of
Tides and Currents.

STATISTICS HYDROGRAPHIC SHEET 3668 A.

Day	Date	Length of Drag	Miles Statute	Positions	Soundings
A	May 4,1917	5000	0.5	11	1
B	May 8,1917	5000	6.6	46	0
C	May 21,1917	6000	3.0	27	2
D	June 29,1917	5000	1.2	8	2
E	July 12,1917	6000	5.0	33	2
F	Aug. 6,1917	5000	3.8	31	2
G	Aug. 14,1917	5000	4.6	34	2
H	Aug. 15,1917	6000	2.5	19	1
J	Aug. 18,1917	5500	4.1	36	1
K	Aug. 25,1917	5000	3.6	25	0
L	Aug. 27,1917	5000	4.5	37	0
M	Aug. 28,1917	5000	1.0	7	0
N	Aug. 29,1917	4000	6.2	36	1
O	Sept. 5,1917	4000	6.5	38	1
		Total	53.1	388	15

Verification Report of Hyd 3668a

The writer verified only that work done in 1917 by R.P. Strong to. The 1914 work had previously been verified.

The plotting was only fair. A few of the positions were found in error and corrected. A majority of the depth diagrams were plotted incorrectly and small discrepancies found throughout in these. Those mostly badly off were replotted.

The area containing the sounding 14, 57 ft. Latitude 14°24'30", Long 71°30'30", according to the plotting was not sweept by the drag on "N" day, when set at 53 ft, nor later on the same day when set at a depth of 35 ft. As 62 was really the sounding obtained, 57 being the depth at which drag was set, there may still be less water at this spot.

The soundings for "J" day, least depth 55 ft. is questionable. With the drag set at 53 on "L" day it went aground; and with a setting of 50 ft. on "N" it again went aground. In neither of these last two cases were soundings obtained. The drag however later on "N" day passed over this spot with a setting of 50 ft. It seems therefore that the sounding should be plotted as 50 instead of

55 ft.

The records were well kept throughout.
On two plans as individuals on the tracing there
was no perceptible overlap of this work with that of
1914. Four splits in this survey are also indicated.

Respectfully submitted,
Alvin Bass,
Engineer.

E.P.E.

ADDRESS THE DIRECTOR
U.S. COAST AND GEODETIC SURVEY
AND REFER TO No. 4-DRM

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
WASHINGTON

June 11, 1923.

SECTION OF FIELD RECORDS

Report on Wire Drag Sheet No. 3668[a].

Surveyed in 1914 and 1917.

Chief of Party, J. H. Hawley; R. P. Strough (1917)

Surveyed by J. H. Hawley; R. P. Strough.

Protracted by Field Party.

Inked by J. B.Shklarin and A. Baer (1917)

Verified and Area and Depth Sheet by J. B. Shklarin and A. Baer (1917).

1. The depth and extent of dragging satisfy the specific instructions.

2. The least water was found on all shoals discovered except as follows: The 57-foot spot shown on Chart 1210 about 2.3 miles south of Elisha Ledge and on smooth sheet at position 11A. The drag grounded at this depth but the actual sounding obtained was 62 feet. On page 2, vol. 1 of the sounding records the Chief of Party notes that as the drag caught at 57 feet and cleared at 56 feet, the sounding plotted should be 57 feet. The smooth plotting, however, does not reveal a 56-foot drag as having cleared this spot. The adjoining sheet 4006 does not overlap this spot sufficiently. Therefore, neither the least water nor the clearance depth over this shoal are known.

   The sounding of 55 feet on J day mentioned in the verification report to be changed to 50 feet, should stand. When the drag first grounded at 50 feet it was due to a dropping of one of the uprights so that at the second passing over,the spot was cleared. It is therefore unnecessary to change the sounding to 50 feet.

   The 50-foot sounding shown at the edge of the drag near the northwestern portion of the sheet was covered on 3668 by a 42-foot drag.

3. The overlaps are sufficient except as shown on the Area and Depth sheet. The overlaps between this sheet and the adjoining sheets 4005 and 4006 are insufficient in some places.

4. There are a number of splits shown on the Area and Depth sheet. The three close together near the northeastern corner of the sheet have been covered on sheet 3668. The two others are of small extent and lie in about 60 and 70 feet of water. The splits caused by insufficient overlap between this sheet and the adjoining sheets are not shown.

5. Further dragging should be done if work is done again in this vicinity, to cover the 57-foot spot mentioned in paragraph 2, and when this is done the splits mentioned in paragraph 4 should be covered.

6. Attention is called to the erroneous method of showing the bight of a drag when the drag grounded. Care should be taken never to include the shoal within the drag when the sounding obtained is less than the drag depth.

7. Reviewed by A. L. Shalowitz, June, 1923.