

6994

WIRE DRAG

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WIRE DRAG

Form 504	
U. S. COAST AND GEODETIC SURVEY	
DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey	Hydrographic (Wire Drag)
Field No.	WaHi-2114
Office No.	H-6994 W. D.
LOCALITY	
State	New Jersey
General locality	Sandy Hook Bay
Locality	West of Sandy Hook & Gedney Channel
1944	
CHIEF OF PARTY	
L. C. Johnson & J. H. Brittain	
LIBRARY & ARCHIVES	
DATE	Sept. 18, 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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.

REGISTER NO. H-6994

Field No. WaHi-2144 (Wire Drag)

REG. NO.

H6994 WIRE DRAG

State NEW JERSEY

General locality SANDY HOOK BAY

Locality WEST OF SANDY HOOK

Scale 1-20,000 Date of survey Sept. - October 1944

Instructions dated August 29, September 1, and September 18, 1944

Vessel s WAINWRIGHT AND HILGARD

Chief of party L. G. Johnson and J. H. Brittain

Surveyed by above

Soundings taken by fathometer, graphic recorder, hand lead, wire

Protracted by A.G. Atwill

Soundings penciled by A³G. Atwill

Soundings in fathoms feet at MLW MLW

REMARKS: This wire drag sheet was processed in the Hydrographic Section of the S.E. District, Norfolk, Va.

DESCRIPTIVE REPORT

to accompany

Sheet WaHi-2144 (Wire Drag)

U. S. C. & G. S. L. WAINWRIGHT, L. C. Johnson, Lt. Comdr., Comdg.
U. S. C. & G. S. L. HILGARD, J. H. Brittain, Lt. Comdr., Comdg.

INSTRUCTIONS;

22 MEK 1995 WA 1 1995 HI 1, dated August 29, 1944, Sept. 1, 1944
and September 18, 1944

AREA:

This wire drag survey covers an area in Sandy Hook Bay, New Jersey, west of the north end of Sandy Hook, and one strip through Gedney Channel. *(Also Sandy Hook Channel)*

METHODS:

Standard dual control wire drag survey methods were used. The drag strips were controlled by three-point fixes on shore objects. The Launches WAINWRIGHT and HILGARD were drag boats, except on A day when Motor Launch 6, USN, was used as the end launch. Motor Launch 6 and a launch furnished by the US Coast Guard were used as tenders. The depth of the drag was determined by tests made by the tender, using a graduated iron pipe, suspended by a graduated stranded 1/8" wire.

CONTROL:

Stations located by triangulation, supplemented by ^{four} ~~two~~ stations ^{and four buoys} located by sextant fixes and cuts, furnished adequate control for this survey.

COMPARISON WITH CHART 369:

No discrepancies were found in the charted depths except an 18' sounding ^{was found} in Lat. 40° 27' 8", Long. 74° 01' 1", and an 18' sounding ^{was found} in Lat. 40° 27' 9", Long. 74° 04' 7". Both the above spots were covered with an effective depth of 17'. *Both 18 ft. sdgs are now charted*

Some fish trap stakes are in the area, and dragging was accomplished as close as practicable to the stakes. The group of stakes in Lat. 40° 28', Long. 74° 03' 18", are probably being removed. On A day the north end of the group was located. On D day the north end at that time was located and found to be south of the original position.

In Lat. 40° 28' 3", Long. 74° 04' 6", there was a single stake projecting above the surface. Later, at low tide, another stake was noted just east of the other stake. This easterly stake was barely bare at low tide. *at O STAKE*

The area of the dredged channel leading south to the long pier was not entirely covered with the drag, the drag being grounded against the navigation buoys.

Sandy Hook -
In the Gedney Channel there are charted two "Obstruction Reported". The one charted in Lat. 40° 29' 1", Long. 73° 59' 1", was covered with effective drag depth of 27', with no indication of grounding. The one charted in Lat. 40° 29' 3", Long. 73° 57' 2", was covered with effective drag depth of ~~30~~ 31', with no indication of grounding. It is recommended that these charted features be removed from the chart.

31 Obstructions have been deleted from charts

83
H.B.P.
H. to M.

MISCELLANEOUS:

There is attached a copy of a RESTRICTED report of obstructions reported to us by the U. S. Navy. A note is typed by each item with the results of the dragging.

In the Gedney Channel the presence of mines caused the drag depths to be several feet above the bottom.

TIDES:

The tide staff at Sandy Hook, New Jersey, was read hourly during working hours, by Ch. Bosn, R. Rogers, USCG, and furnished data for reducing the drag depths to Mean Low Water. The staff readings and curves are attached to this report.

Mean Low Water on the staff is 3.8 ft.

STATISTICS:

Date	Day	Statute Miles	Strip. No.	Positions	No. Soundings.
1944					
Sept. 25	A	4.6		52	1
27	B	3.5		36	1
28	C	6.8		63	2
Oct. 2	D	4.3		49	1
3	E	6.3		46	
4	F	7.8		69	
5	G	3.0		22	
	Totals	40.3		337	5

Area covered 6.8 square statute miles.

Respectfully submitted,
Clifton B. Wagner
Clifton B. Wagner,
Lieut. Comdr. C&GS.

Approved and forwarded,

L. C. Johnson
L. C. Johnson,
Lieut. Comdr. C&GS,
Chief of Party.

J. H. Brittain
J. H. Brittain,
Lieut. Comdr., C&GS,
Chief of Party.

RESTRICTED

Following are locations of "obstructions" in Gedney Channel, as reported by various DE's (drawing about 14') which were discussed 18 September by you and Captain Jensen. Obstruction reported in items 1, 3 & 4 is disproved by present survey effective depth of 31 ft.

- (1) Damage sustained 11 July 1944 in center of Gedney Channel, 100 yards to westward of line drawn between unlighted channel buoys number 3 and number 4.
- (2) Sustained damage 19 July, 1944, with Gedney Channel Buoy No. 6 close abeam to starboard enroute to Leonardo Piers, NAD, Earle, N. J., and with Raritan Bay Channel Buoy 1A close abeam to port enroute via Chappel Hill Channel to NYNYK.
- (3) Sustained damage 75 yards south of Buoy No. 4, Gedney Channel, 11 July 1944.
- (4) Sustained damage 11 July 1944 while proceeding in mid-channel close aboard starboard side near an unlighted, unidentified nun buoy, position $40^{\circ} 29' 23''$ north; $73^{\circ} 57' 0''$ west.

"Obstruction" near buoy "6" disproved by effective depth of 31 ft. Obstruction near buoy "1A" disproved by effective depths of $20\frac{1}{2}$ - 21 ft.

(signed) E. D. WEBER
for A. E. TYLER
Lieutenant Commander USNR

(1), (3) & (4) are in same location, and was covered by the wire drag with an effective depth of ~~30~~³¹ ft. No indication of grounding occurred. Obstruction of items 1, 3, & 4, previously charted is considered disproved and is no longer charted.

(2). The spot to east of buoy 1A was covered with the wire drag with an effective depth of $21\frac{1}{2}$ ft., with no indication of grounding. Obstructions near buoys "6" and "1A" are not charted and are disproved by present survey.

The area to east of buoy 6 was not covered, as the Navy authorities were not interested in the area of the dredged channel. The drag was grounded against the buoy from the west.

Clifton J. Wagner,
Lieut. Comdr. C&GS.

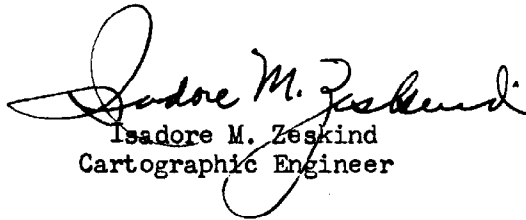
A D D E N D U M

to accompany

WIRE DRAG SMOOTH SHEET H-6994 (Field WaHi 2144)

This wire drag sheet was processed in the Hydrographic Section
of the Southeastern District, Norfolk, Virginia.

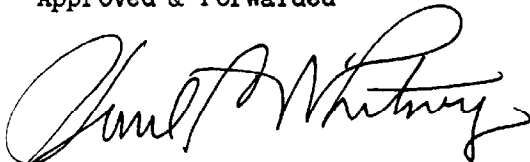
Respectfully submitted,



Isadore M. Zeskind
Cartographic Engineer

Norfolk, Va.
Sept. 14, 1945

Approved & Forwarded



Paul C. Whitney
Supervisor SE District

GEOGRAPHIC NAMES **WIRE DRAG**
 Survey No. **H6994**

Name on Survey	WIRE DRAG									
	A	B	C	D	E	F	G	H	K	
	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
<u>New Jersey</u>			(for title)					U.S.G.B		1
<u>Sandy Hook</u>			(also tide staff location)							2
<u>Sandy Hook Bay</u>			(for title)							3
<u>Gedney Channel</u>								U.S.G.B		4
<u>Sandy Hook Channel</u>										5
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										27

Names underlined in red approved
 by L. Heck on 9/26/46

Surveys Section (Chart Division)

WIRE DRAG

HYDROGRAPHIC SURVEY NO. .. **H6994**

Records accompanying survey:

Boat sheets ..1.; sounding vols. .2...; wire drag vols. 4....;
bomb vols.; graphic recorder rolls;
special reports, etc.
.....

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

Number of positions on sheet	337
Number of positions checked	41
Number of positions revised	1
Number of soundings recorded	5
Number of soundings revised (refers to depth only)	0
Number of soundings erroneously spaced	—
Number of signals erroneously plotted or transferred	0
Topographic details	Time 3 hrs
Junctions	Time 0
Verification of soundings from graphic record	Time —

Verification by *R.D. Goodrich*... Total time 49 hrs. Date *Sept. 9, 1946*

Review by *R.H. Carstens*..... Time 12 hr. Date *Sept 26, 1946*

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 6994 W.D.

FIELD NO. Wa Hi 2144

New Jersey, Sandy Hook Bay, West of Sandy Hook
Surveyed in Sept. - Oct. 1944 Scale 1:20,000
Project No. ---

Soundings:

Control:

Handlead
Wire drag groundings

Sextant fixes on shore signals

Chief of Party - L. C. Johnson and J. H. Brittain
Surveyed by - L. C. Johnson and J. H. Brittain
Protracted by - A. G. Atwill
Soundings plotted by - A. G. Atwill
Verified and (inked) by - R. D. Goodrich
Reviewed by - R. H. Carstens, September 26, 1946
Inspected by - H. W. Murray

1. Shoreline and Signals

The shoreline is from T-5100 (1937) and T-5101 (1932).
The signals originate with triangulation of 1867-1940
and with sextant fixes recorded in the wire drag volumes.

2. Adjoining Wire Drag Surveys

There are no adjoining wire drag surveys in this area.

3. Comparison with Contemporary Hydrographic Surveys

There are no contemporary hydrographic surveys by this
bureau within the limits of the present survey.

4. Comparison with Chart 369 (Latest print date 7/6/46)
Chart 543 (Latest print date 6/15/46)

A. Hydrography

The following soundings charted from the present sur-
vey before verification and review have been rejected
in the process of verification and should be deleted
from the chart:

<u>Sounding</u>	<u>Lat.</u>	<u>Long.</u>	<u>Charts</u>
32	40° 28.8'	74° 00.73'	369 & 543
18	40° 28.40'	74° 04.50'	369 & 543 "
18	40° 28.29'	74° 04.54'	543 "

(The 32 listed above was a grounding on a marker buoy and the 18 ft. depths were groundings against stakes. The 18 in lat. 40° 28.4', long. 74° 04.5', should have been plotted at the stake 0.1 mile to the southward).

It is noted that the groundings of 13 ft. in lat. 40° 27.29', long. 74° 02.73' and 18-ft. in lat. 40° 27.28', long. 74° 02.52' from the present survey are not charted on the latest prints. However, a 13 is charted from Bp. 38689 (1944) about 100 meters southwest of the position of the 13 on the present survey.

The 19 charted in lat. 40° 27.93', long. 74° 03.08' from Bp. 39817 (1945) falls within an area covered by an effective depth of 21½ ft. The 19 originates with an after-dredging survey made subsequent to the present survey and should be retained on the chart.

Other discrepancies between charted and present survey information are minor.

B. Aids to Navigation

A comparison with respect to floating aids to navigation is omitted because of numerous changes made subsequent to the present survey. Fixed aids to navigation are in agreement with the charted positions and satisfactorily mark the features intended.

5. Condition of Survey

The field plotting was satisfactorily accomplished.

The Descriptive Report and sounding records are complete and comprehensive.

6. Compliance with the Project Instructions

The survey adequately complies with the Project Instructions. Designated obstructions in the Instructions, which were dragged and disproved, are listed on page 3 of the Descriptive Report.

7. Additional Field Work Recommended

The survey adequately serves the purpose intended and no additional field work is recommended.

Examined and approved:

Chief, Nautical Chart Branch

Chief, Division of Charts

Chief, Section of Hydrography

Chief, Division of Coastal Surveys

839

7400

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. June 1937

TIDE NOTE FOR HYDROGRAPHIC SHEET

6 December 1945

~~Division of Hydrography and Topography:~~

Division of Charts: Attention: H. W. MURRAY

Plane of reference approved in
6 volumes of ~~sounding~~ records for
wire drag

HYDROGRAPHIC SHEET H. S. 6994

Locality Sandy Hook Bay, New Jersey

Chief of Party: ~~A.~~ C. Johnson and J. H. Brittain in 1944


Plane of reference is mean low water, reading

2.0 ft. on tide staff at Sandy Hook

9.4 ft. below B. M. 2

Height of mean high water above plane of reference is 4.6 feet.

Condition of records satisfactory except as noted below:


Chief, Division of Tides and Currents.

